

CONFIDENTIAL

Technology-Enabled Business Services (TEBS)

Quarterly Update – 2019 Q3



TEBS Overview

Cherry Tree has been tracking trends and activity in the Technology Enabled Business Services (TEBS) space for more than 15 years, including the TEBS 100 index

TEBS companies are defined as those that:

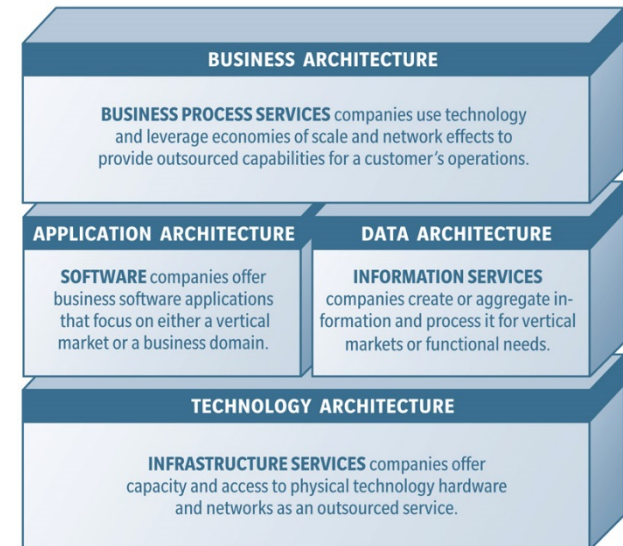
- Offer a solution, product or service that is delivered or enhanced via technology
- Generate revenue primarily from other businesses (“B2B”)
- Use their own intellectual property to differentiate their solution

The TEBS 100 is a broad index of 100 publicly-traded companies. The four segments of the TEBS 100 align with the open architecture framework:

- Business Process Services
- Software
- Information Services
- Infrastructure Services

TEBS companies are consistently valued at a premium to the overall market due to fundamental business advantages

- Recurring Revenue
- Operating Leverage
- High Switching Costs



Cherry Tree Research, The Open Group

Valuation Multiples – 9/30/2019

| TEBS Segment | EV/Revenue | EV/EBITDA |
|---------------------------|------------|-----------|
| Software | 6.5x | 25.2x |
| Information Services | 7.3x | 21.5x |
| Business Process Services | 2.1x | 15.4x |
| Infrastructure Services | 3.1x | 11.9x |
| S&P 500 | 3.3x | 13.4x |

TEBS 100

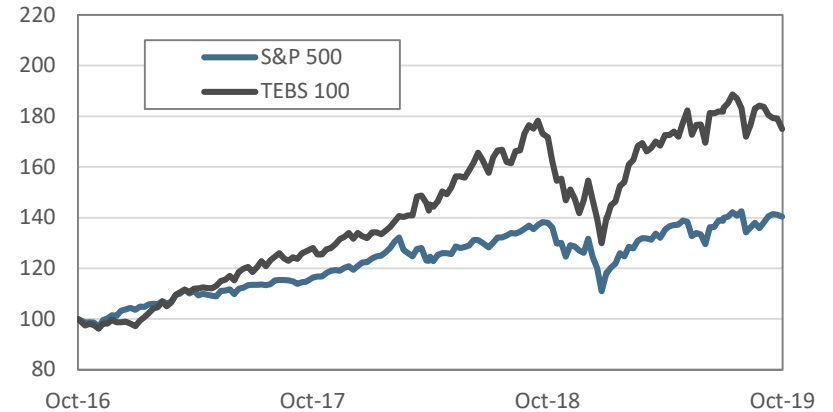
An index of 100 publicly-traded Technology Enabled Business Services companies

TEBS 100 Index Performance

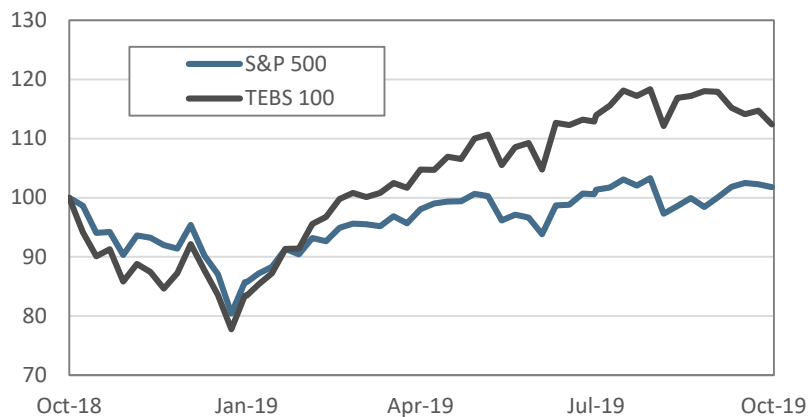
- The TEBS 100 continues to outperform the overall market over a three-year period (75% return over three years vs. 41% return for the S&P 500)
- Over the last twelve months the TEBS 100 had a 2% return, which slightly outperformed the S&P 500's 1.8% return

— S&P 500 — TEBS 100

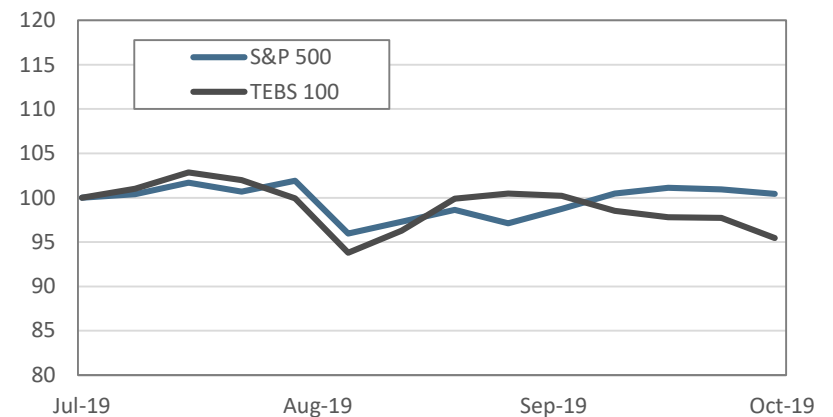
3-Year TEBS 100 Performance vs. S&P 500



1-Year TEBS 100 Performance vs. S&P 500



3-Month TEBS 100 Performance vs. S&P 500



TEBS 100 Segment Operating Metrics

- The revenue growth of the TEBS 100 index and three of its four segments continue to outperform the S&P 500
- Gross margins for the TEBS 100 are much higher than the median S&P 500 company, allowing for greater operating leverage and potential for higher overall profitability
- However, EBITDA margins continue to lag the S&P 500, likely due to reinvestment of profits to drive revenue growth

| EBITDA Margin | | | |
|---------------------------|-----------|-----------|-----------|
| | 9/30/2017 | 9/30/2018 | 9/30/2019 |
| Software | 10.9% | 10.8% | 8.4% |
| Information Services | 27.0% | 26.7% | 25.7% |
| Business Process Services | 16.6% | 14.7% | 15.9% |
| Infrastructure Services | 21.4% | 21.9% | 23.7% |
| TEBS 100 | 13.6% | 14.9% | 15.4% |
| S&P 500 | 23.1% | 23.3% | 22.8% |

| Revenue Growth | | | |
|---------------------------|-----------|-----------|-----------|
| | 9/30/2017 | 9/30/2018 | 9/30/2019 |
| Software | 15.0% | 15.8% | 16.1% |
| Information Services | 8.3% | 10.6% | 8.2% |
| Business Process Services | 4.8% | 7.7% | 4.0% |
| Infrastructure Services | 22.9% | 22.5% | 10.0% |
| TEBS 100 | 10.8% | 13.4% | 12.2% |
| S&P 500 | 5.5% | 8.1% | 5.0% |

| Gross Margin | | | |
|---------------------------|-----------|-----------|-----------|
| | 9/30/2017 | 9/30/2018 | 9/30/2019 |
| Software | 67.9% | 66.8% | 66.9% |
| Information Services | 64.3% | 63.0% | 63.3% |
| Business Process Services | 35.2% | 34.8% | 34.9% |
| Infrastructure Services | 58.2% | 58.6% | 60.3% |
| TEBS 100 | 60.2% | 61.7% | 62.4% |
| S&P 500 | 43.6% | 43.7% | 44.4% |

TEBS 100 SEGMENT PERFORMANCE

Software

Information Services

Business Process Services

Infrastructure Services

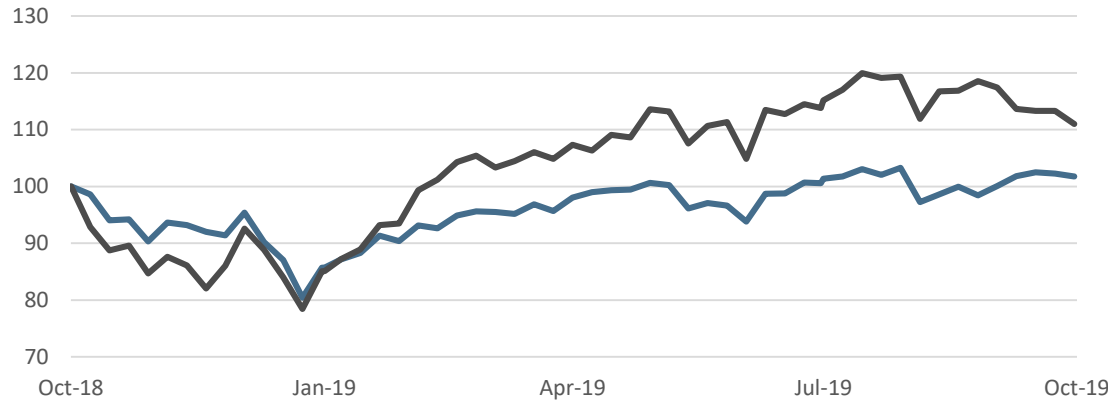
TEBS 100 Companies – Software

| | Enterprise Value | LTM Revenue | Gross Margin | EBITDA Margin | EV/ | | Revenue Growth |
|---------------------------------|------------------|-------------|--------------|---------------|---------|--------|----------------|
| Company | | | | | Revenue | EBITDA | |
| 8x8, Inc. | \$1,999 | \$366 | 62.6% | -24.9% | 5.5x | n/m | 17.8% |
| ACI Worldwide, Inc. | \$4,990 | \$1,069 | 55.4% | 16.3% | 4.7x | 28.7x | 7.3% |
| Adobe Inc. | \$134,213 | \$10,644 | 85.2% | 33.5% | 12.6x | 37.6x | 24.2% |
| Allscripts Healthcare Solutions | \$2,654 | \$1,751 | 47.6% | 6.6% | 1.5x | 22.8x | 14.2% |
| American Software, Inc. | \$388 | \$109 | 53.0% | 7.9% | 3.6x | n/m | -4.0% |
| Appian Corporation | \$3,091 | \$242 | 63.0% | -21.5% | 12.8x | n/m | 16.9% |
| Asure Software, Inc. | \$218 | \$99 | 63.2% | 10.3% | 2.2x | 21.3x | 38.4% |
| Atlassian Corporation Plc | \$29,612 | \$1,210 | 82.6% | -1.7% | 24.5x | n/m | 37.4% |
| Benefitfocus, Inc. | \$917 | \$273 | 51.3% | -8.1% | 3.4x | n/m | 10.4% |
| Blackbaud, Inc. | \$4,975 | \$872 | 54.3% | 13.7% | 5.7x | n/m | 5.1% |
| BlackLine, Inc. | \$2,521 | \$255 | 78.0% | -3.7% | 9.9x | n/m | 26.0% |
| Bottomline Technologies | \$1,738 | \$422 | 56.7% | 9.0% | 4.1x | n/m | 7.1% |
| Citrix Systems, Inc. | \$13,061 | \$3,002 | 87.0% | 26.1% | 4.4x | 16.7x | 3.2% |
| Commvault Systems, Inc. | \$1,588 | \$697 | 83.1% | 6.1% | 2.3x | 37.5x | -1.8% |
| Cornerstone OnDemand, Inc. | \$3,301 | \$554 | 73.9% | 2.8% | 6.0x | n/m | 6.7% |
| Enghouse Systems Limited | \$1,402 | \$276 | 69.3% | 28.6% | 5.1x | 17.8x | 6.2% |
| FireEye, Inc. | \$2,912 | \$857 | 66.6% | -13.1% | 3.4x | n/m | 6.5% |
| Fiserv, Inc. | \$76,125 | \$5,977 | 47.2% | 32.3% | 12.7x | 39.5x | 3.5% |
| Five9, Inc. | \$3,174 | \$290 | 59.7% | 6.8% | 11.0x | n/m | 28.4% |
| Fortinet, Inc. | \$11,333 | \$1,955 | 75.4% | 17.1% | 5.8x | 34.0x | 19.9% |
| HealthStream, Inc. | \$710 | \$249 | 58.1% | 12.6% | 2.9x | 22.8x | 12.1% |
| HubSpot, Inc. | \$6,068 | \$591 | 80.7% | -5.7% | 10.3x | n/m | 33.9% |
| Intuit Inc. | \$66,860 | \$6,784 | 83.1% | 30.4% | 9.9x | 32.5x | 12.6% |
| Jack Henry & Associates, Inc. | \$11,146 | \$1,553 | 40.6% | 27.4% | 7.2x | 26.2x | 5.6% |
| Manhattan Associates, Inc. | \$5,112 | \$589 | 55.4% | 22.8% | 8.7x | 38.1x | 3.5% |
| Medidata Solutions, Inc. | \$5,518 | \$685 | 73.6% | 11.4% | 8.1x | n/m | 16.9% |
| Mimecast Limited | \$2,254 | \$361 | 73.6% | 7.8% | 6.2x | n/m | 28.0% |
| NextGen Healthcare, Inc. | \$1,056 | \$528 | 58.4% | 7.2% | 2.0x | 27.6x | -1.0% |
| NIC Inc. | \$1,209 | \$342 | 40.1% | 21.9% | 3.5x | 16.1x | -1.4% |
| Okta, Inc. | \$11,377 | \$487 | 72.3% | -29.7% | 23.4x | n/m | 51.1% |

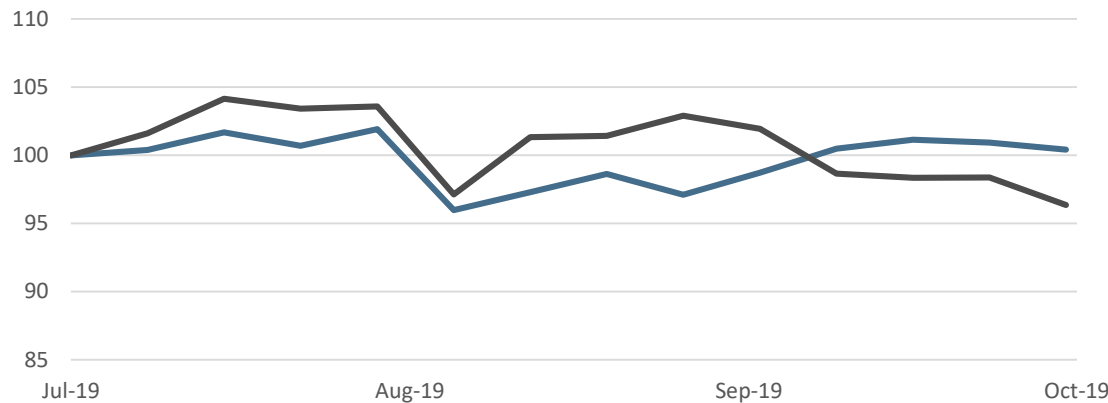
| Company | Enterprise | LTM | Gross | EBITDA | EV/ | | Revenue |
|-----------------------------|------------|----------|--------|--------|---------|--------|---------|
| | Value | Revenue | Margin | Margin | Revenue | EBITDA | Growth |
| Oracle Corporation | \$202,295 | \$39,531 | 79.8% | 40.9% | 5.1x | 12.5x | 0.1% |
| Paycom Software, Inc. | \$12,043 | \$653 | 87.3% | 33.6% | 18.4x | n/m | 31.1% |
| Pegasystems Inc. | \$5,299 | \$878 | 65.4% | -5.7% | 6.0x | n/m | 0.0% |
| Proofpoint, Inc. | \$7,110 | \$800 | 72.9% | -3.4% | 8.9x | n/m | 29.9% |
| PROS Holdings, Inc. | \$2,312 | \$222 | 62.4% | -16.3% | 10.4x | n/m | 20.7% |
| Q2 Holdings, Inc. | \$3,586 | \$277 | 48.4% | -10.6% | 13.0x | n/m | 28.6% |
| QAD Inc. | \$794 | \$317 | 53.5% | 1.2% | 2.5x | n/m | -3.6% |
| RealPage, Inc. | \$6,273 | \$930 | 61.3% | 16.6% | 6.7x | n/m | 20.1% |
| salesforce.com, inc. | \$130,327 | \$14,729 | 74.8% | 14.0% | 8.8x | n/m | 24.3% |
| ServiceNow, Inc. | \$47,041 | \$3,011 | 76.4% | 5.5% | 15.6x | n/m | 33.1% |
| Shopify Inc. | \$34,044 | \$1,296 | 55.6% | -7.2% | 26.3x | n/m | 51.9% |
| Splunk Inc. | \$17,168 | \$2,044 | 81.6% | -9.9% | 8.4x | n/m | 36.1% |
| SPS Commerce, Inc. | \$1,464 | \$264 | 67.1% | 18.0% | 5.6x | 30.9x | 12.5% |
| SS&C Technologies Holdings | \$21,197 | \$4,389 | 43.3% | 36.3% | 4.8x | 13.3x | 101.8% |
| Symantec Corporation | \$17,576 | \$4,822 | 77.7% | 22.5% | 3.6x | 16.2x | 0.1% |
| Tecsys Inc. | \$157 | \$63 | 48.1% | 3.4% | 2.5x | n/m | 20.1% |
| Teradata Corporation | \$3,563 | \$2,060 | 49.5% | 7.3% | 1.7x | 23.8x | -6.4% |
| The Descartes Systems Group | \$3,407 | \$300 | 73.5% | 34.5% | 11.4x | 33.0x | 15.3% |
| Tyler Technologies, Inc. | \$10,125 | \$1,000 | 47.1% | 19.1% | 10.1x | n/m | 12.4% |
| Upland Software, Inc. | \$1,084 | \$184 | 68.2% | 24.1% | 5.9x | 24.5x | 51.3% |
| Veeva Systems Inc. | \$21,186 | \$969 | 73.0% | 29.8% | 21.9x | n/m | 26.1% |
| VMware, Inc. | \$63,352 | \$9,496 | 85.5% | 26.5% | 6.7x | 25.2x | 13.8% |
| Workday, Inc. | \$38,367 | \$3,245 | 70.2% | -8.6% | 11.8x | n/m | 33.6% |
| Zendesk, Inc. | \$8,253 | \$703 | 69.9% | -17.6% | 11.7x | n/m | 39.0% |
| 25th Percentile | \$2,063 | \$304 | 55.4% | (3.6%) | 4.2x | 19.5x | 5.7% |
| Median | \$5,051 | \$700 | 66.9% | 8.4% | 6.5x | 25.2x | 16.1% |
| 75th Percentile | \$16,141 | \$1,904 | 75.2% | 22.7% | 10.8x | 32.7x | 28.5% |

Segment Performance – Software

1-Year Stock Performance vs. S&P 500



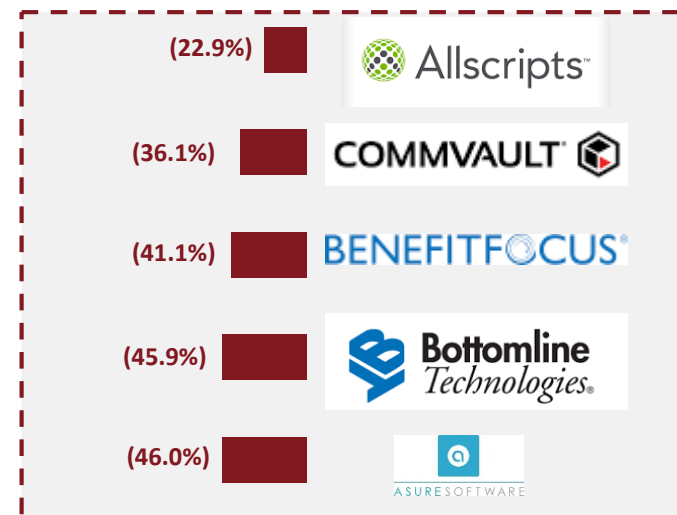
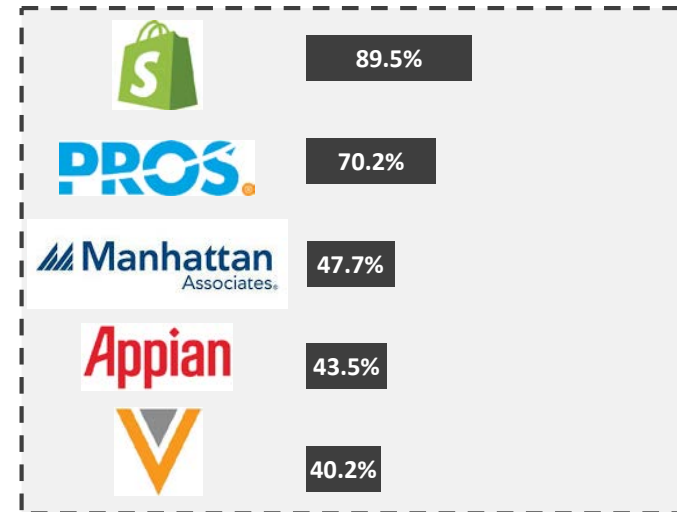
3-Month Stock Performance vs. S&P 500



— S&P 500

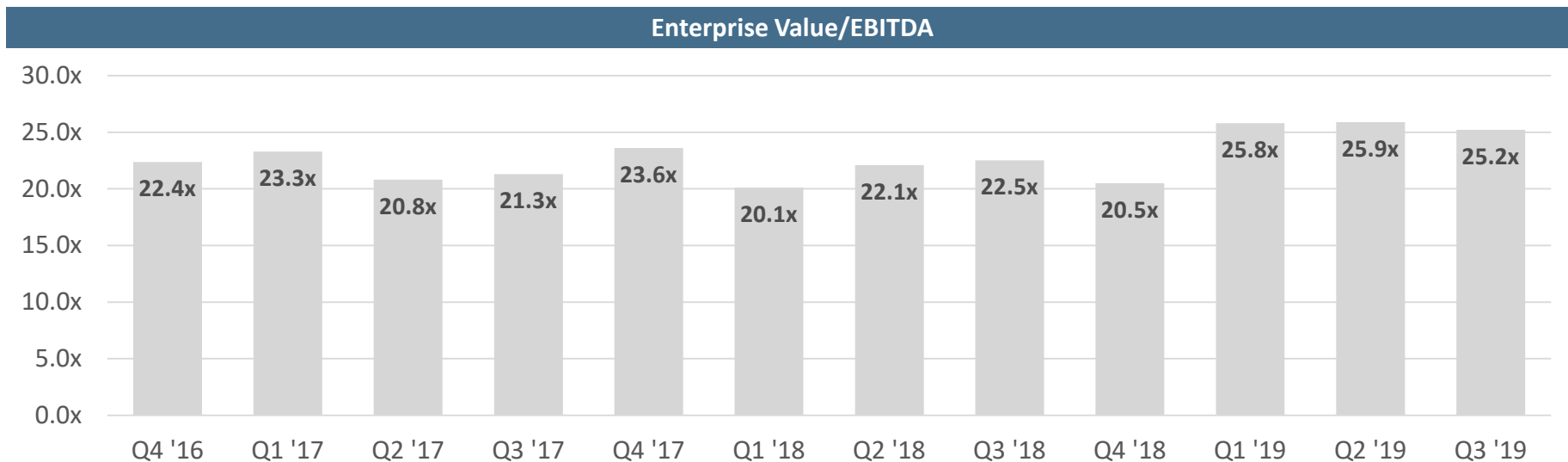
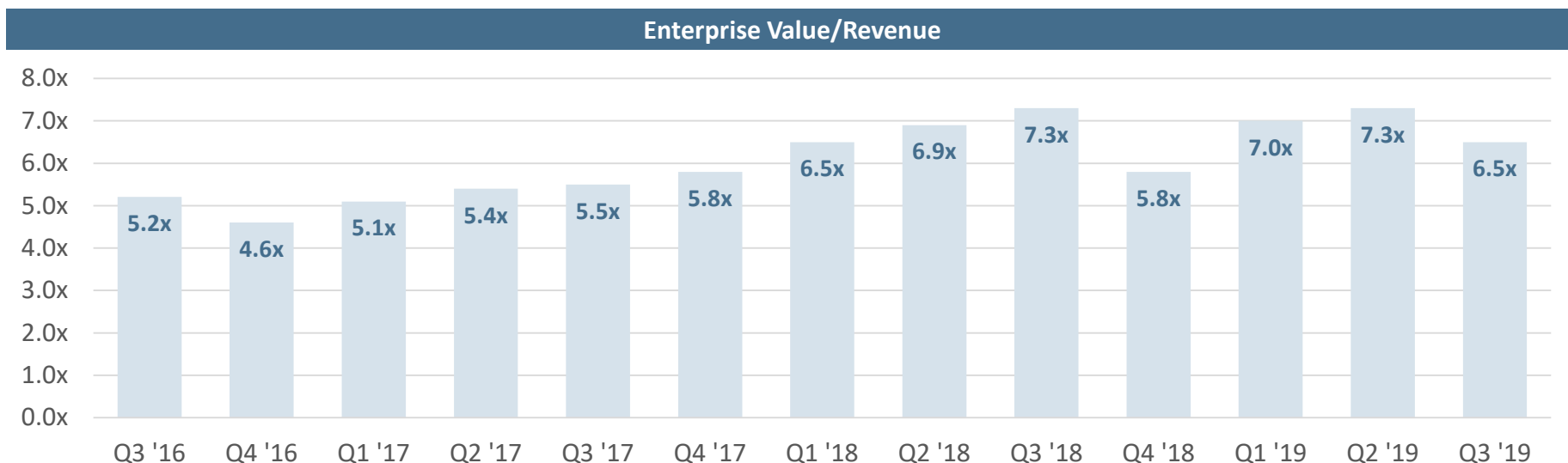
— TEBS Software

Top Performers (1-Yr)



Bottom Performers (1-Yr)

Segment Valuation – Software

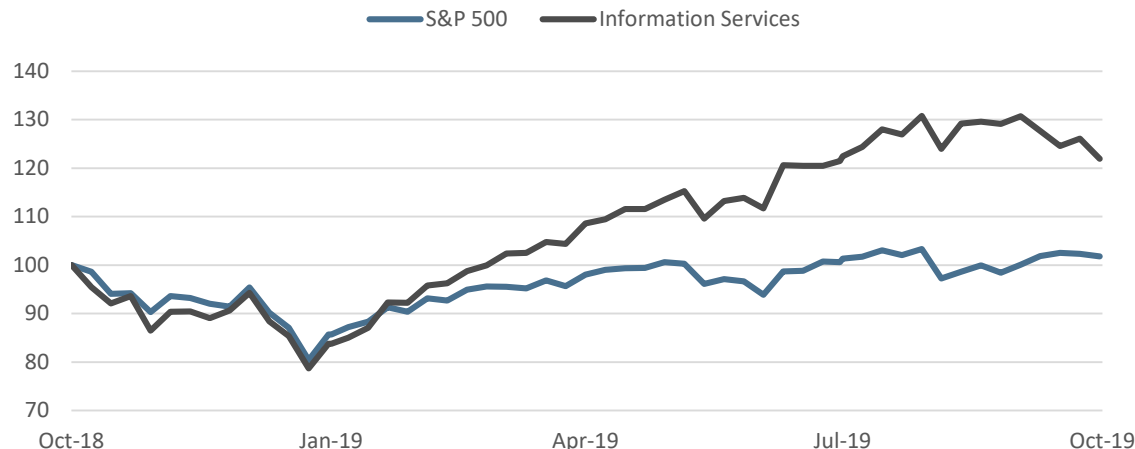


TEBS 100 Companies – Information Services

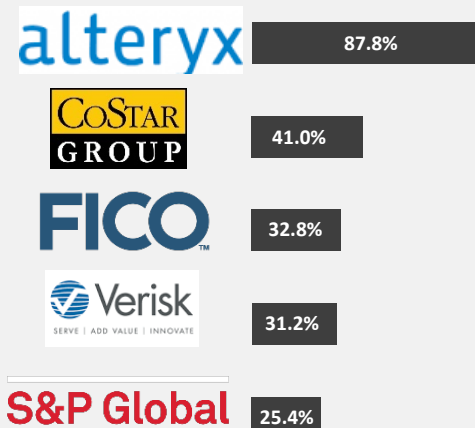
| Company | Enterprise Value | LTM Revenue | Gross Margin | EBITDA Margin | EV/ | | Revenue Growth |
|-------------------------------|------------------|----------------|--------------|---------------|--------------|--------------|----------------|
| | | | | | Revenue | EBITDA | |
| Alteryx, Inc. | \$6,626 | \$310 | 90.4% | 7.4% | 21.4x | n/m | 77.5% |
| CoreLogic, Inc. | \$5,526 | \$1,732 | 48.7% | 19.8% | 3.2x | 16.1x | -7.4% |
| CoStar Group, Inc. | \$20,526 | \$1,293 | 78.3% | 32.9% | 15.9x | n/m | 20.6% |
| Equifax Inc. | \$19,891 | \$3,396 | 55.4% | 19.8% | 5.9x | 29.6x | -0.6% |
| FactSet Research Systems Inc. | \$9,484 | \$1,435 | 53.8% | 34.7% | 6.6x | 19.0x | 6.3% |
| Fair Isaac Corporation | \$9,514 | \$1,144 | 71.4% | 25.5% | 8.3x | 32.6x | 14.7% |
| Forrester Research, Inc. | \$748 | \$412 | 57.6% | 7.8% | 1.8x | 23.2x | 19.6% |
| Gartner, Inc. | \$15,757 | \$4,052 | 63.5% | 14.6% | 3.9x | 26.7x | 6.4% |
| IHS Markit Ltd. | \$31,762 | \$4,362 | 62.2% | 34.4% | 7.3x | 21.2x | 12.2% |
| Moody's Corporation | \$43,648 | \$4,497 | 71.3% | 46.8% | 9.7x | 20.8x | -0.7% |
| Morningstar, Inc. | \$5,989 | \$1,057 | 60.1% | 25.7% | 5.7x | 22.0x | 9.1% |
| Nielsen Holdings plc | \$16,560 | \$6,449 | 56.9% | 21.9% | 2.6x | 11.7x | -3.2% |
| S&P Global Inc. | \$64,800 | \$6,357 | 72.9% | 49.5% | 10.2x | 20.6x | 1.3% |
| TransUnion | \$19,138 | \$2,498 | 66.3% | 35.6% | 7.7x | 21.5x | 18.7% |
| Verisk Analytics, Inc. | \$28,491 | \$2,490 | 63.3% | 43.9% | 11.4x | 26.1x | 8.2% |
| 25th Percentile | \$8,055 | \$591 | 57.2% | 19.8% | 4.8x | 20.6x | -0.6% |
| Median | \$16,560 | \$1,293 | 63.3% | 25.7% | 7.3x | 21.5x | 8.2% |
| 75th Percentile | \$24,509 | \$2,573 | 71.4% | 35.2% | 10.0x | 26.1x | 18.7% |

Segment Performance – Information Services

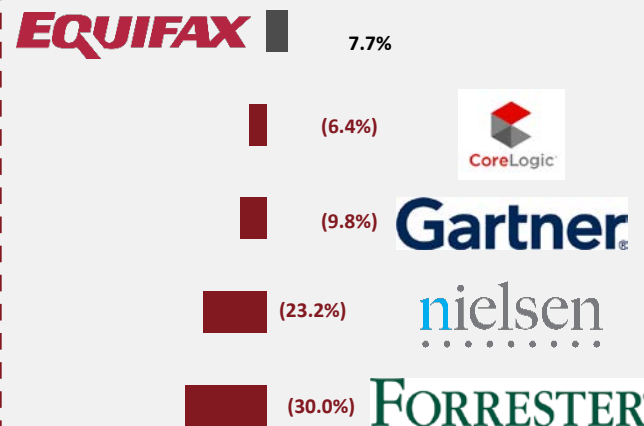
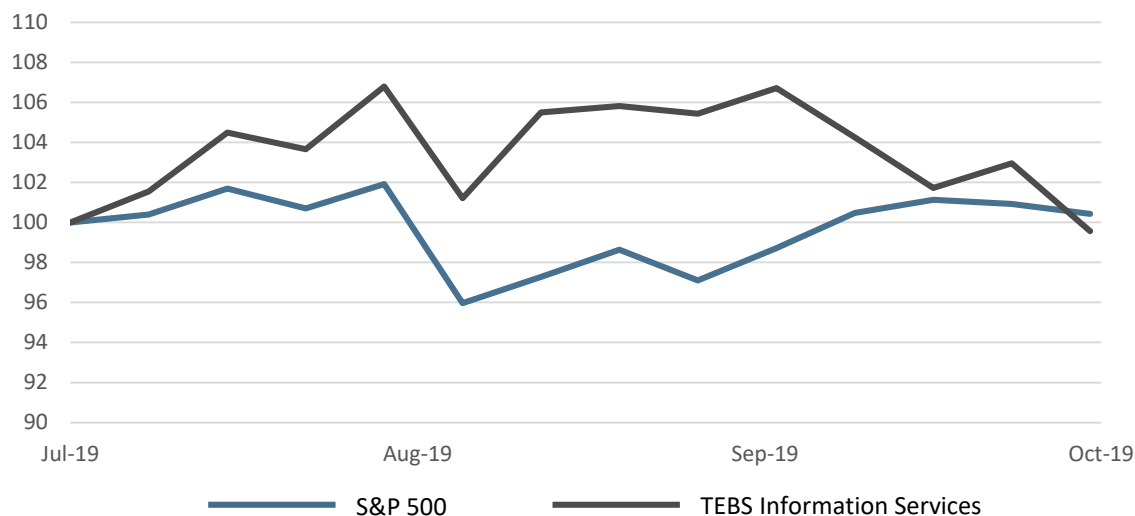
1-Year Stock Performance vs. S&P 500



Top Performers (1-Yr)

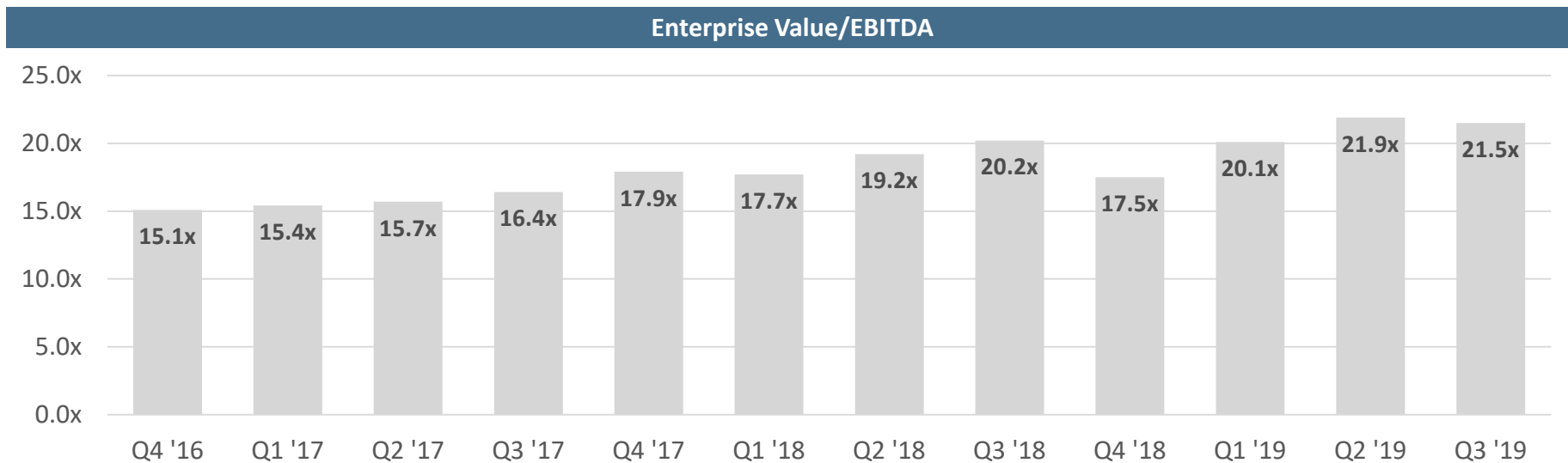
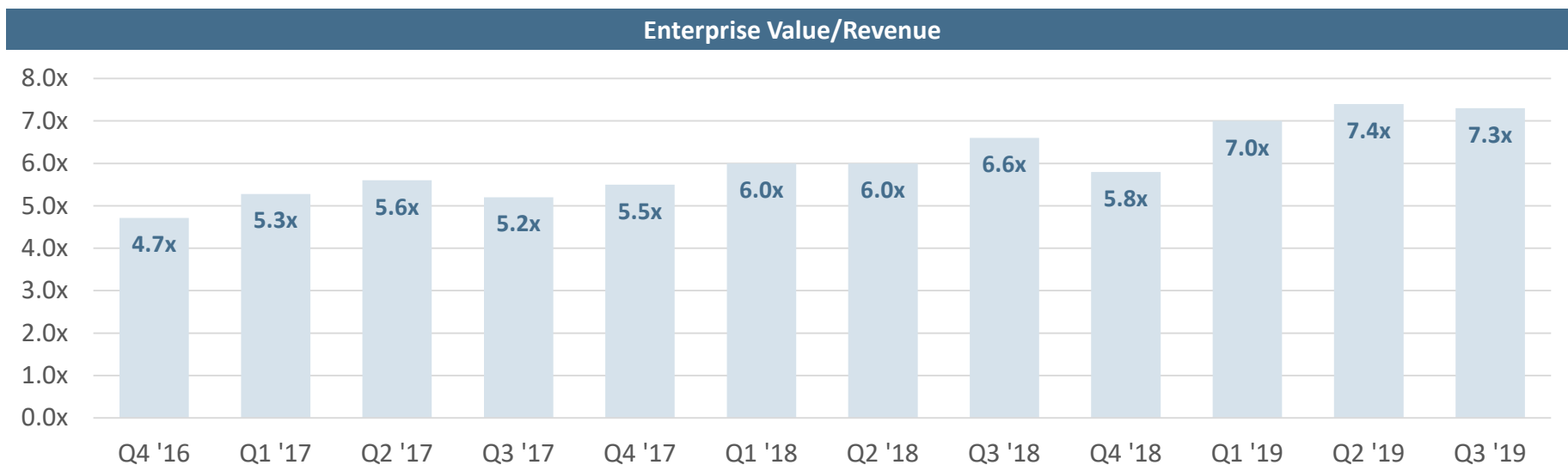


3-Month Stock Performance vs. S&P 500



Bottom Performers (1-Yr)

Segment Valuation – Information Services

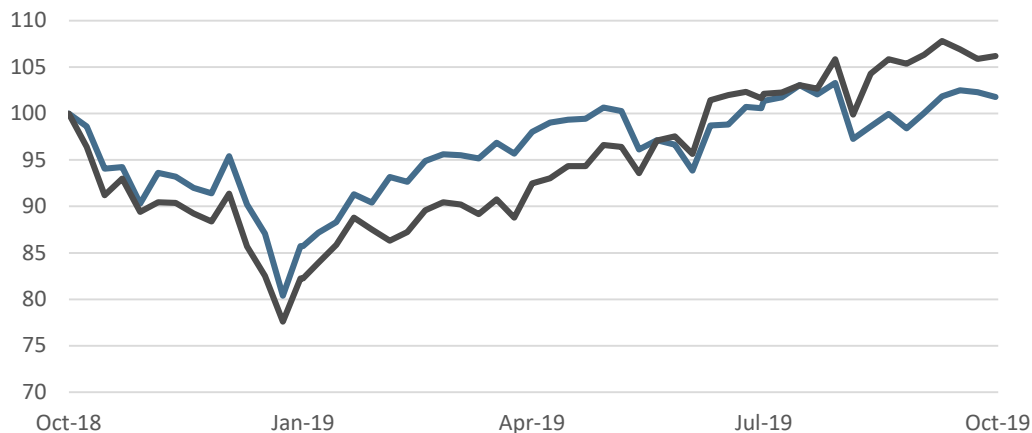


TEBS 100 Companies – Business Process Services

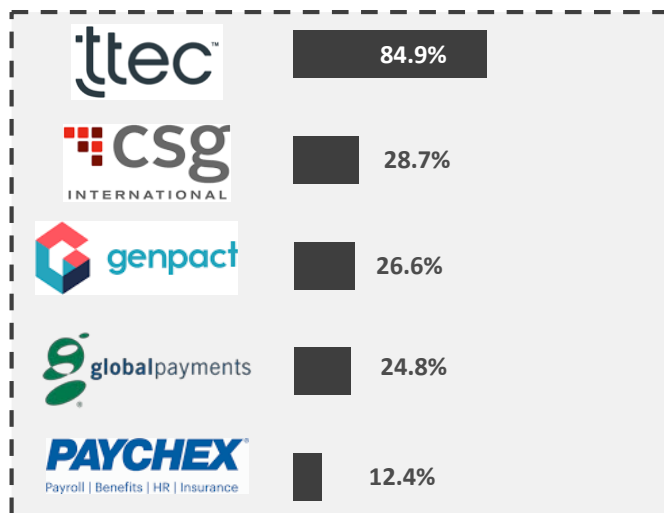
| Company | Enterprise Value | LTM Revenue | Gross Margin | EBITDA Margin | EV/ | | Revenue Growth |
|--------------------------------------|------------------|----------------|--------------|---------------|-------------|--------------|----------------|
| | | | | | Revenue | EBITDA | |
| Amdocs Limited | \$8,568 | \$4,059 | 34.9% | 18.7% | 2.1x | 11.3x | 2.7% |
| Automatic Data Processing, Inc. | \$70,312 | \$14,175 | 45.1% | 24.6% | 5.0x | 20.2x | 6.4% |
| Broadridge Financial Solutions, Inc. | \$15,417 | \$4,362 | 28.2% | 20.9% | 3.5x | 16.9x | 0.7% |
| Cass Information Systems, Inc. | \$606 | \$159 | 43.8% | 33.1% | 3.8x | 11.5x | 10.0% |
| Cimpress N.V. | \$4,982 | \$2,751 | 49.1% | 11.7% | 1.8x | 15.4x | 6.1% |
| Conduent Incorporated | \$3,090 | \$4,856 | 22.2% | 11.1% | 0.6x | 5.7x | -16.0% |
| CSG Systems International, Inc. | \$1,972 | \$951 | 47.4% | 16.8% | 2.1x | 12.4x | 16.1% |
| Exela Technologies, Inc. | \$1,673 | \$1,577 | 23.4% | 10.5% | 1.1x | 10.1x | 3.2% |
| ExlService Holdings, Inc. | \$2,392 | \$949 | 34.0% | 13.5% | 2.5x | 18.7x | 17.6% |
| Genpact Limited | \$8,647 | \$3,274 | 35.7% | 15.9% | 2.6x | 16.7x | 14.5% |
| Global Payments Inc. | \$53,055 | \$3,556 | 66.7% | 40.5% | 14.9x | 36.9x | -4.4% |
| InnerWorkings, Inc. | \$405 | \$1,116 | 22.8% | 1.3% | 0.4x | 27.2x | -3.0% |
| Paychex, Inc. | \$29,727 | \$3,902 | 68.3% | 41.1% | 7.6x | 18.5x | 13.2% |
| PFSweb, Inc. | \$115 | \$252 | 31.5% | 6.1% | 0.5x | 7.5x | -6.4% |
| TTEC Holdings, Inc. | \$2,566 | \$1,571 | 25.7% | 11.8% | 1.6x | 13.8x | 4.0% |
| 25th Percentile | \$1,822 | \$1,034 | 27.0% | 11.4% | 1.3x | 11.4x | -3.0% |
| Median | \$3,090 | \$2,751 | 34.9% | 15.9% | 2.1x | 15.4x | 4.0% |
| 75th Percentile | \$12,032 | \$3,980 | 46.2% | 22.8% | 3.7x | 18.6x | 13.2% |

Segment Performance – Business Process Services

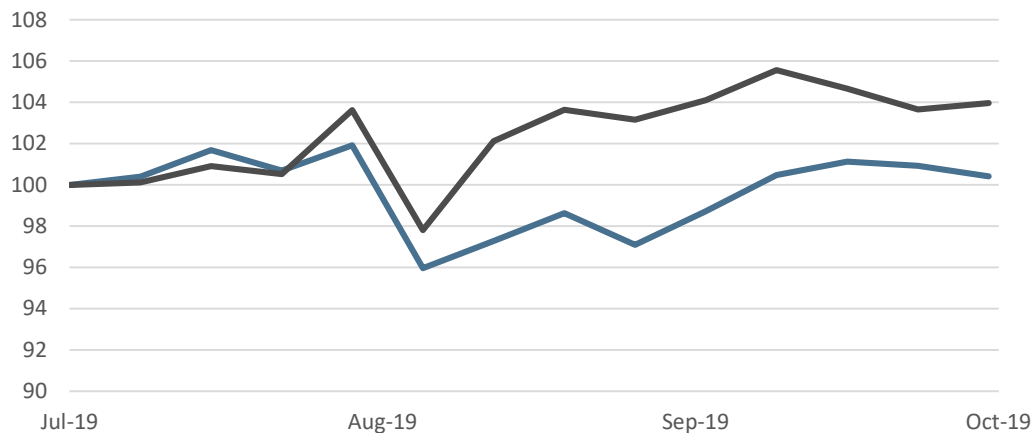
1-Year Stock Performance vs. S&P 500



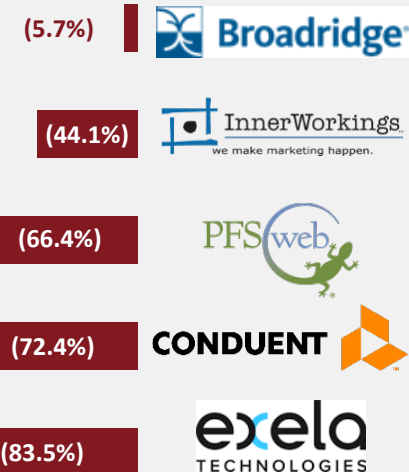
Top Performers (1-Yr)



3-Month Stock Performance vs. S&P 500

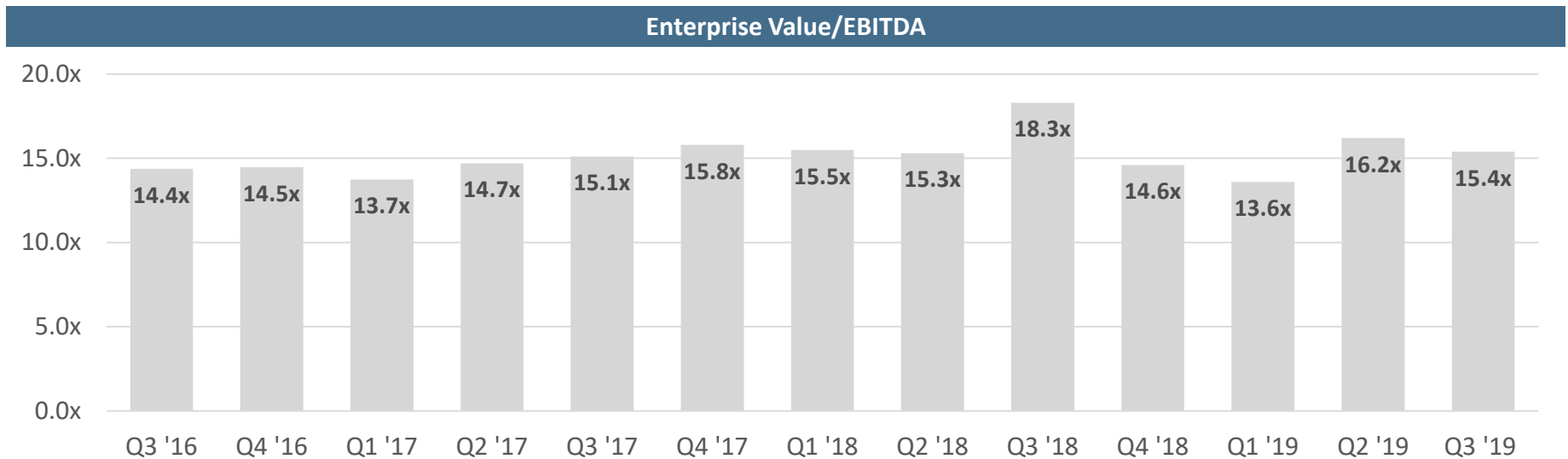
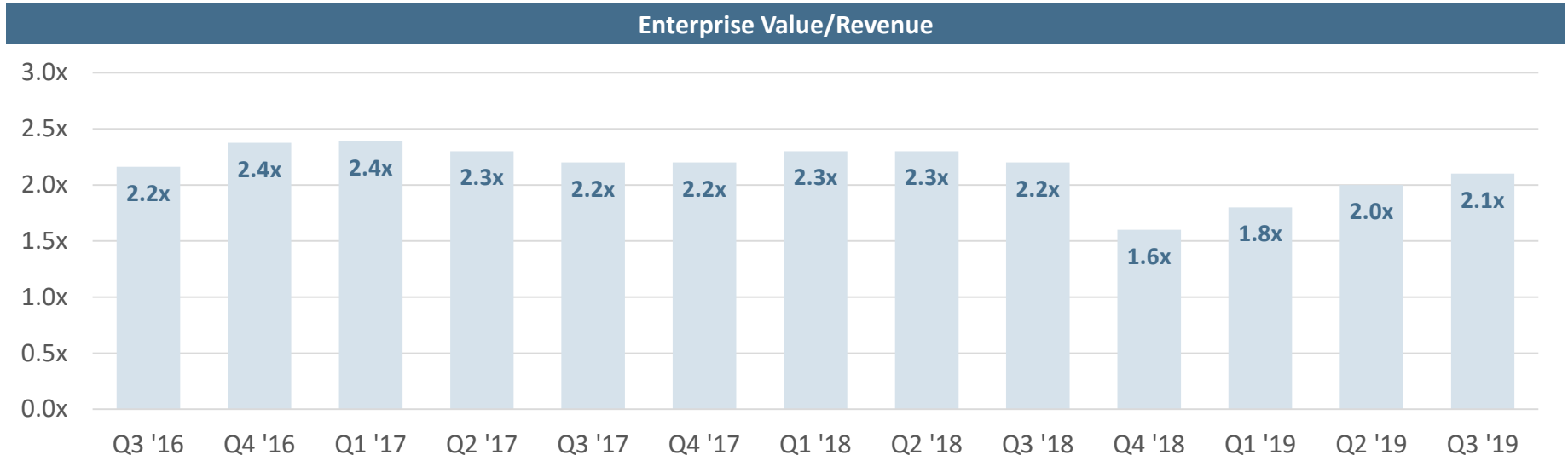


— S&P 500 — TEBS Business Process Services



Bottom Performers (1-Yr)

Segment Valuation – Business Process Services

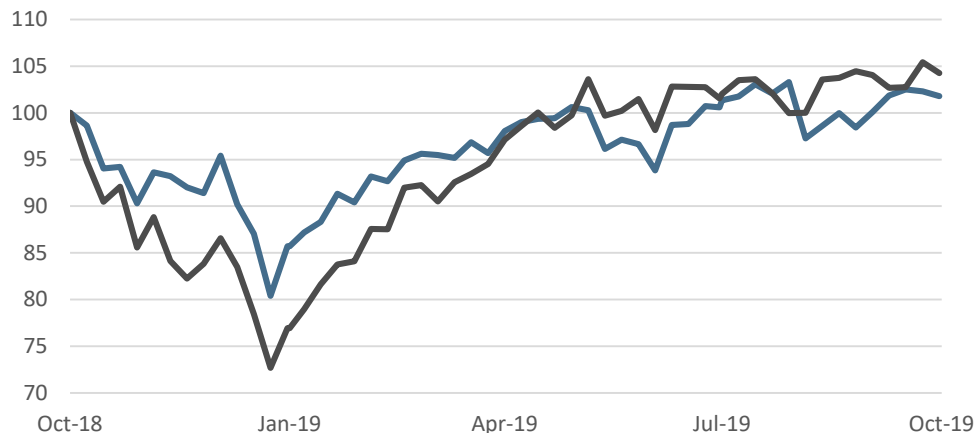


TEBS 100 Companies – Infrastructure Services

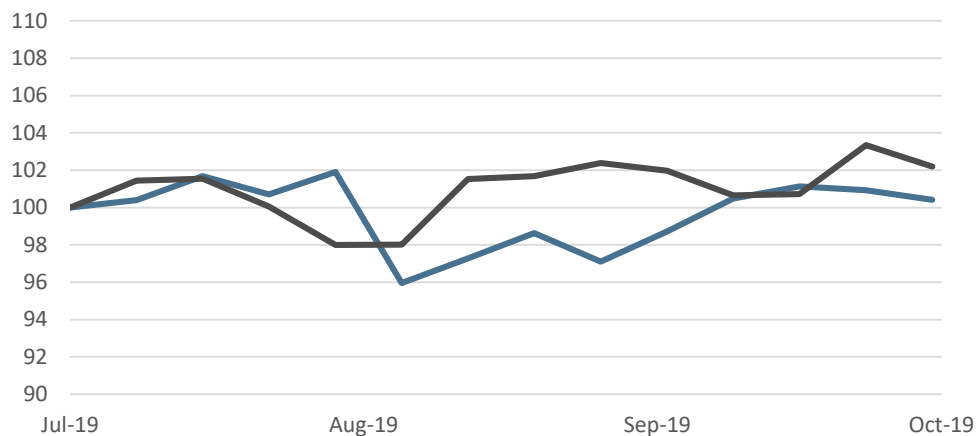
| Company | Enterprise Value | LTM Revenue | Gross Margin | EBITDA Margin | EV/ | | Revenue Growth |
|--|------------------|----------------|--------------|---------------|-------------|--------------|----------------|
| | | | | | Revenue | EBITDA | |
| Akamai Technologies, Inc. | \$15,322 | \$2,795 | 65.4% | 28.0% | 5.5x | 19.6x | 6.9% |
| Boingo Wireless, Inc. | \$609 | \$268 | 33.2% | 28.7% | 2.3x | 7.9x | 17.2% |
| Box, Inc. | \$2,644 | \$655 | 70.3% | -12.8% | 4.0x | n/m | 18.1% |
| Carbonite, Inc. | \$1,107 | \$357 | 78.4% | 10.1% | 3.1x | 30.7x | 34.8% |
| Cogent Communications Holdings, Inc. | \$3,137 | \$518 | 60.3% | 33.0% | 6.1x | 18.3x | 4.9% |
| Endurance International Group Holdings, Inc. | \$2,332 | \$1,125 | 55.5% | 25.7% | 2.1x | 8.1x | -3.7% |
| Equinix, Inc. (REIT) | \$59,578 | \$5,342 | 49.2% | 44.4% | 11.2x | 25.1x | 10.0% |
| GoDaddy Inc. | \$13,167 | \$2,823 | 66.4% | 11.9% | 4.7x | 39.3x | 14.3% |
| Gogo Inc. | \$1,551 | \$848 | 46.5% | 15.4% | 1.8x | 11.9x | 3.4% |
| GTT Communications, Inc. | \$4,171 | \$1,787 | 45.3% | 23.7% | 2.3x | 9.8x | 72.0% |
| Internap Corporation | \$784 | \$308 | 54.3% | 28.4% | 2.5x | 9.0x | 4.3% |
| Limelight Networks, Inc. | \$326 | \$182 | 51.0% | -1.6% | 1.8x | n/m | -7.2% |
| Pure Storage, Inc. | \$3,741 | \$1,518 | 66.8% | -9.2% | 2.5x | n/m | 28.4% |
| Wix.com Ltd. | \$5,629 | \$680 | 77.4% | -5.1% | 8.3x | n/m | 32.3% |
| Zayo Group Holdings, Inc. | \$13,850 | \$2,578 | 64.5% | 45.4% | 5.4x | 11.8x | -0.9% |
| 25th Percentile | \$1,329 | \$438 | 50.1% | 4.3% | 2.3x | 9.4x | 3.4% |
| Median | \$3,137 | \$848 | 60.3% | 23.7% | 3.1x | 11.9x | 10.0% |
| 75th Percentile | \$9,398 | \$2,183 | 66.6% | 28.5% | 5.4x | 22.3x | 28.4% |

Segment Performance – Infrastructure Services

1-Year Stock Performance vs. S&P 500 – Update Chart



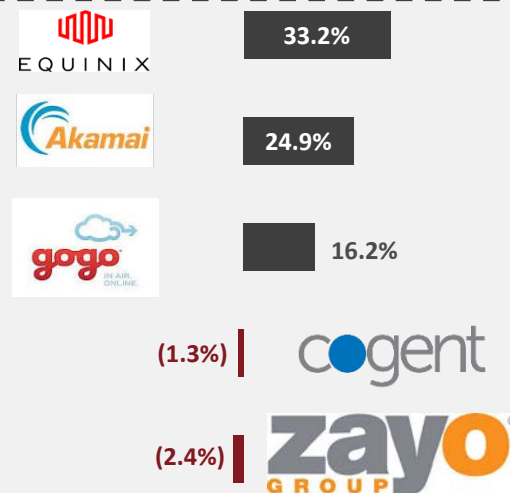
3-Month Stock Performance vs. S&P 500



— S&P 500

— TEBS Infrastructure Services

Top Performers (1-Yr)



(56.5%)

CARBONITE

(57.4%)

ENDURANCE International Group

(68.2%)

boingo

(78.3%)

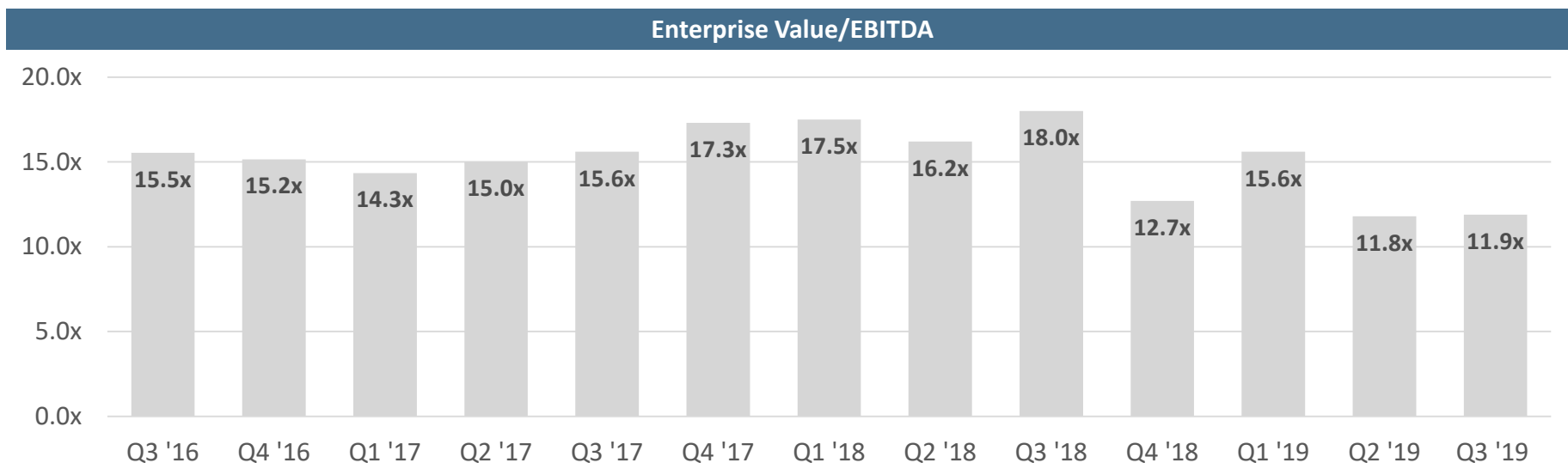
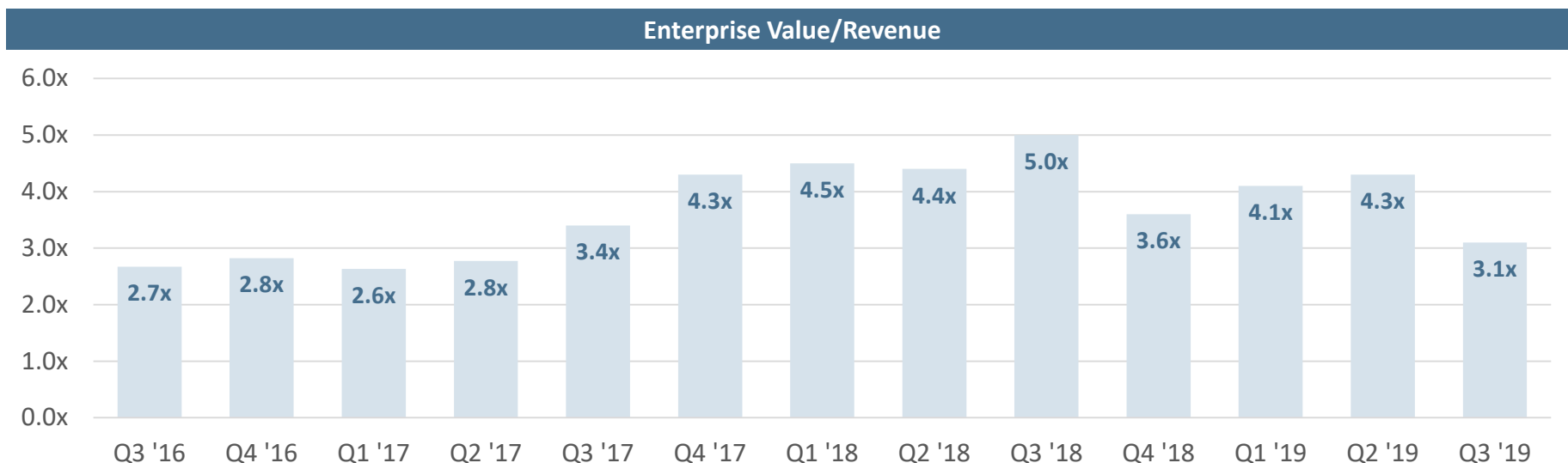
gtt

(79.6%)

INAP
COLO | CLOUD | NETWORK

Bottom Performers (1-Yr)

Segment Valuation – Infrastructure Services



M&A ACTIVITY

Select M&A Transactions

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | | Segment |
|-----------|---|--|------------|---------|--------|---------|--------|--------|---|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | | |
| 9/30/2019 | Orchard Software Corporation | Francisco Partners | - | - | - | - | - | - | - | Software |
| 9/30/2019 | Xinnovation, Inc. | Bigtincan Holdings Limited (ASX:BTH) | \$7.5 | - | - | - | - | - | - | Software |
| 9/30/2019 | VitalSmarts, LC | Leeds Equity Partners VI, L.P. | - | - | - | - | - | - | - | Software |
| 9/30/2019 | Converged Communications Inc. | The Cook & Boardman Group, LLC | - | - | - | - | - | - | - | Software |
| 9/30/2019 | Gopay Information Technology Co., Ltd | PayPal Holdings, Inc. (NasdaqGS:PYPL) | - | - | - | - | - | - | - | Software |
| 9/30/2019 | Tracerisk LLC | Continuity Engine, Inc. | - | - | - | - | - | - | - | Software |
| 9/30/2019 | Aptus Health, Inc. | WebMD Health Corp. | - | - | - | - | - | - | - | Software |
| 9/27/2019 | PowerLine Technology Inc. | ikeGPS Group Limited (NZSE:IKE) | - | - | - | - | - | - | - | Software |
| 9/26/2019 | Crossix Solutions Inc. | Veeva Systems Inc. (NYSE:VEEV) | \$430.0 | - | - | - | - | - | - | Software |
| 9/26/2019 | Infinite Automation Systems, Inc. | IIOT-OXYS, Inc. (OTCPK:ITOX) | - | - | - | - | - | - | - | Software |
| 9/26/2019 | Libring Technologies, Inc. | App Annie Inc. | - | - | - | - | - | - | - | Software |
| 9/26/2019 | Streamlabs, Inc. | Logitech International S.A. (SWX:LOGN) | \$118.0 | - | - | - | - | - | - | Software |
| 9/26/2019 | eMids Technologies Inc. | New Mountain Capital, LLC | - | - | - | - | - | - | - | Business Process Services |
| 9/26/2019 | AddSecure | Castik Capital Partners GmbH | - | - | - | - | - | - | - | Infrastructure Services |
| 9/26/2019 | Quick Med Claims, LLC | Perella Weinberg Partners LP | - | - | - | - | - | - | - | Business Process Services |
| 9/25/2019 | Vanguard Systems, Inc. | MHC Software, Inc. | - | - | - | - | - | - | - | Software |
| 9/25/2019 | MHC Software, Inc. | Strattam Capital, LLC | - | - | - | - | - | - | - | Software |
| 9/25/2019 | Mainstreet Computers Inc. | Convenient Payments, LLC | - | - | - | - | - | - | - | Software |
| 9/25/2019 | Corvana Corporation | SugarCRM Inc. | - | - | - | - | - | - | - | Software |
| 9/25/2019 | 3Points, LLC | Ntiva, Inc. | - | - | - | - | - | - | - | Business Process Services |
| 9/25/2019 | Selerity, Inc. | Deallogic (Holdings) Limited | - | - | - | - | - | - | - | Information Services |
| 9/25/2019 | National Tax Search, LLC | CoreLogic, Inc. (NYSE:CLGX) | - | - | - | - | - | - | - | Information Services |
| 9/24/2019 | Acquia Inc. | Vista Equity Partners LLC | - | - | - | - | - | - | - | Software |
| 9/24/2019 | SimpleTax Software Inc. | Wealthsimple Financial Inc. | - | - | - | - | - | - | - | Software |
| 9/24/2019 | Zingle, Inc. | Medallia, Inc. (NYSE:MDLA) | \$42.0 | - | - | - | - | - | - | Software |
| 9/24/2019 | INLT | Amazon.com, Inc. (NasdaqGS:AMZN) | - | - | - | - | - | - | - | Software |
| 9/24/2019 | Kord Technologies, Inc. | Centauri | - | - | - | - | - | - | - | Business Process Services |
| 9/24/2019 | Sterling Compliance LLC | Integrated Compliance Solutions, LLC | - | - | - | - | - | - | - | Business Process Services |
| 9/24/2019 | Wireless Analytics, LLC | Motus, LLC | - | - | - | - | - | - | - | Business Process Services |
| 9/24/2019 | Nexogy, Inc. | T3 Communications, Inc. | - | - | - | - | - | - | - | Infrastructure Services |
| 9/24/2019 | IHS Global Limited | Montagu Private Equity LLP | - | - | - | - | - | - | - | Information Services |
| 9/23/2019 | Certain Material Assets of Avianis Systems, LLC | Wheels Up Partners LLC | - | - | - | - | - | - | - | Software |
| 9/23/2019 | Walker Sands Inc. | Stone-Goff Partners | - | - | - | - | - | - | - | Business Process Services |
| 9/23/2019 | Hangar Technology, Inc. | AirMap, Inc. | - | - | - | - | - | - | - | Information Services |
| 9/22/2019 | servicefriend | Facebook, Inc. (NasdaqGS:FB) | - | - | - | - | - | - | - | Software |
| 9/20/2019 | StatPro Group plc (AIM:SOG) | Confluence Technologies, Inc. | \$210.3 | 3.4x | 28.1x | \$61.3 | \$7.5 | 12.2% | - | Software |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|--|--|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 9/20/2019 | Qualifacts Systems, Inc. | Warburg Pincus LLC | - | - | - | - | - | - | Software |
| 9/19/2019 | Interlogic Outsourcing Inc. | PrimePay, LLC | \$3.5 | - | - | - | - | - | Business Process Services |
| 9/19/2019 | WhereScape Inc. | IDERA, Inc. | - | - | - | - | - | - | Software |
| 9/19/2019 | Axiom Cyber Solutions LLC | Entourage Investment Group, LLC | - | - | - | - | - | - | Business Process Services |
| 9/19/2019 | The SPI Group LLC | Ruder Finn, Inc. | - | - | - | - | - | - | Business Process Services |
| 9/19/2019 | Groundwork Digital, LLC | Bentz, Whaley, Flessner & Associates, Inc. | - | - | - | - | - | - | Business Process Services |
| 9/19/2019 | Bromium, Inc. | HP Inc. (NYSE:HPQ) | - | - | - | - | - | - | Infrastructure Services |
| 9/18/2019 | Exaserv Inc. | HR Path SAS | - | - | - | - | - | - | Software |
| 9/18/2019 | OfferLogic, Inc. | Rokt Pte Ltd. | - | - | - | - | - | - | Software |
| 9/18/2019 | Kynectiv, Inc. | US HealthConnect, Inc. | - | - | - | - | - | - | Software |
| 9/18/2019 | Semmler Limited | GitHub, Inc. | - | - | - | - | - | - | Business Process Services |
| 9/18/2019 | Mediotype LLC | Blue Acorn iCi | - | - | - | - | - | - | Business Process Services |
| 9/18/2019 | Outrigger Media, Inc. | Nielsen Holdings plc (NYSE:NLSN) | - | - | - | - | - | - | Information Services |
| 9/18/2019 | 1Strategy, LLC | TEKsystems Global Services, LLC | \$5.2 | 1.8x | - | \$2.9 | - | - | Business Process Services |
| 9/18/2019 | a360inc | Knox Capital Management LLC | - | - | - | - | - | - | Business Process Services |
| 9/17/2019 | Nextchapter Bk, Inc. | Fastcase.com, Inc. | - | - | - | - | - | - | Software |
| 9/17/2019 | Real Factors, Inc. | 7Park Data, Inc. | - | - | - | - | - | - | Software |
| 9/17/2019 | Witekio Holding | Avnet, Inc. (NasdaqGS:AVT) | - | - | - | - | - | - | Business Process Services |
| 9/17/2019 | Xitij Corporation | Xoriant Corporation | - | - | - | - | - | - | Business Process Services |
| 9/17/2019 | Glowlink Communications Technology, Inc. | iDirect Government, LLC | \$20.0 | - | - | - | - | - | Infrastructure Services |
| 9/17/2019 | Beyond Media Inc | Watch Communications | - | - | - | - | - | - | Infrastructure Services |
| 9/16/2019 | Blueocean Technologies Sdn Bhd | Mediaocean LLC | - | - | - | - | - | - | Software |
| 9/16/2019 | MediaJel, Inc. | SITO Mobile, Ltd. (NasdaqCM:SITO) | \$17.4 | - | - | - | - | - | Business Process Services |
| 9/16/2019 | Datassential | Spectrum Equity Management, L.P. | - | - | - | - | - | - | Information Services |
| 9/16/2019 | Inventory Locator Service, LLC | CAMP Systems Inc. | - | - | - | - | - | - | Information Services |
| 9/16/2019 | KryptCo, Inc. | Akamai Technologies, Inc. (NasdaqGS:AKAM) | - | - | - | - | - | - | Infrastructure Services |
| 9/12/2019 | New Service, LLC | Zumper, Inc. | - | - | - | - | - | - | Software |
| 9/12/2019 | Investrack Business of Globacom Technologies LLC | SS&C Technologies Holdings, Inc. (NasdaqGS:SSNC) | - | - | - | - | - | - | Software |
| 9/12/2019 | Transcendent Corporation | Alpine SG, LLC | - | - | - | - | - | - | Software |
| 9/12/2019 | Compass Analytics, LLC | Black Knight, Inc. (NYSE:BKI) | - | - | - | - | - | - | Software |
| 9/12/2019 | Avalanche Cloud Corporation | HID Global Corporation | - | - | - | - | - | - | Infrastructure Services |
| 9/11/2019 | Burning Glass International Inc. | KKR & Co. Inc. (NYSE:KKR) | - | - | - | - | - | - | Information Services |
| 9/11/2019 | Livermore Software Technology Corporation | ANSYS, Inc. (NasdaqGS:ANSS) | \$775.0 | - | - | - | - | - | Software |
| 9/11/2019 | BP Logix, Inc. | Finrock Growth Partners, LLC | - | - | - | - | - | - | Software |
| 9/11/2019 | Mango Health, Inc. | TrialCard Incorporated | - | - | - | - | - | - | Software |
| 9/11/2019 | TechLink, Inc. | The Execu-Search Group, Inc. | - | - | - | - | - | - | Business Process Services |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|--|--|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 9/11/2019 | Web Hosting Brands of Add2net, Inc. | HostPapa, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 9/11/2019 | Vertice Technologies, LLC | Vista Equity Partners LLC | \$500.0 | - | - | - | - | - | Software |
| 9/10/2019 | Apprente, Inc. | McDonald's Corporation (NYSE:MCD) | - | - | - | - | - | - | Software |
| 9/10/2019 | Delego Software Inc. | EVO Payments, Inc. (NasdaqGM:EVOP) | - | - | - | - | - | - | Software |
| 9/10/2019 | Foxtec Corp. | Maestro Holdings | - | - | - | - | - | - | Business Process Services |
| 9/10/2019 | Skookum, Inc. | GlobalLogic Inc. | - | - | - | - | - | - | Business Process Services |
| 9/10/2019 | Global Management Systems, Inc. | Dinocrates Group LLC | - | - | - | - | - | - | Infrastructure Services |
| 9/10/2019 | Streamroot, Inc. | CenturyLink, Inc. (NYSE:CTL) | - | - | - | - | - | - | Infrastructure Services |
| 9/10/2019 | Kazan Networks Corporation | Western Digital Corporation (NasdaqGS:WDC) | - | - | - | - | - | - | Infrastructure Services |
| 9/10/2019 | Hatchbuck, Inc. | Benchmark Internet Group, LLC | - | - | - | - | - | - | Software |
| 9/9/2019 | Talech Inc. | U.S. Bancorp (NYSE:USB) | - | - | - | - | - | - | Software |
| 9/9/2019 | RSD SA | Rocket Software, Inc. | - | - | - | - | - | - | Software |
| 9/9/2019 | Substantially all Assets of Ecomdash | Endurance International Group Holdings, Inc. | \$9.6 | - | - | - | - | - | Software |
| 9/9/2019 | Xtract Technologies Inc. | Patriot One Technologies Inc. (TSX:PAT) | \$17.4 | - | - | - | - | - | Software |
| 9/9/2019 | Electronic Transaction Clearing, Inc. | Apex Clearing Solutions, LLC | - | - | - | - | - | - | Business Process Services |
| 9/9/2019 | 6 River Systems, Inc. | Shopify Inc. (NYSE:SHOP) | \$381.0 | - | - | - | - | - | Business Process Services |
| 9/9/2019 | eZforex.com, Inc. | Currency Exchange International, Corp. (TSX:CXI) | \$3.3 | 1.9x | - | \$1.7 | - | - | Business Process Services |
| 9/9/2019 | NYI-NJ | 365 Operating Company LLC | - | - | - | - | - | - | Infrastructure Services |
| 9/9/2019 | Exceda Ltda. | Akamai Technologies, Inc. (NasdaqGS:AKAM) | - | - | - | - | - | - | Infrastructure Services |
| 9/9/2019 | Telegration, Inc. | Cloud Service Partners, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 9/9/2019 | Ventiv Technology Inc. | Tailwind Capital Group, LLC | - | - | - | - | - | - | Software |
| 9/9/2019 | Orbit Cyber Inc. | Ampcus Cyber Inc. | - | - | - | - | - | - | Business Process Services |
| 9/6/2019 | Vantrix Corporation | Like Minded Entertainment Inc. | - | - | - | - | - | - | Software |
| 9/6/2019 | Computer Word Processing Systems, Inc. | Red River Computer Company, Inc. | - | - | - | - | - | - | Business Process Services |
| 9/5/2019 | TruthPoint Solutions | TVR Communications, LLC | - | - | - | - | - | - | Software |
| 9/5/2019 | Tutela Technologies Ltd. | Comniscient Technologies LLC | - | - | - | - | - | - | Infrastructure Services |
| 9/5/2019 | Innovative Software Solutions, Inc. | Zenith American Holding, Inc. | - | - | - | - | - | - | Software |
| 9/5/2019 | ICON Identity Solutions, Inc. | MC Group | - | - | - | - | - | - | Business Process Services |
| 9/5/2019 | Leveraging Technology Solutions LLC | Lightwell Inc. | - | - | - | - | - | - | Business Process Services |
| 9/5/2019 | Assets of ALTEK Information Technology, Inc. | Digital Intelligence Systems, LLC | - | - | - | - | - | - | Business Process Services |
| 9/5/2019 | I'Car Systems Groupe SAS | Providence Strategic Growth Capital Partners L.L.C | - | - | - | - | - | - | Software |
| 9/5/2019 | ViewPoint Government Solutions, Inc. | OpenGov, Inc. | - | - | - | - | - | - | Software |
| 9/5/2019 | Thought Industries Inc. | Luminate Capital Partners | - | - | - | - | - | - | Software |
| 9/5/2019 | iPresent Limited | Mediafly, Inc. | - | - | - | - | - | - | Software |
| 9/5/2019 | Axiom Global, Inc. | Permira Advisers Ltd. ; Permira Funds | - | - | - | - | - | - | Software |
| 9/5/2019 | Forte Research Systems, Inc. | Advarra | - | - | - | - | - | - | Software |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|---|--|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 9/5/2019 | RITEQ Pty Ltd | Ceridian HCM Holding Inc. (NYSE:CDAY) | - | - | - | - | - | - | Software |
| 9/5/2019 | OS National, LLC | Opendoor Labs, Inc. | - | - | - | - | - | - | Information Services |
| 9/5/2019 | Lasser, Inc. | TGS-NOPEC Geophysical Company ASA (OB:TGS) | - | - | - | - | - | - | Information Services |
| 9/5/2019 | Convey Health Solutions, Inc. | TPG Capital, L.P. | - | - | - | - | - | - | Business Process Services |
| 9/5/2019 | Business Process Outsourcing of Suppla Group | Iron Mountain Incorporated (NYSE:IRM) | - | - | - | - | - | - | Business Process Services |
| 9/5/2019 | AllComm Wireless, Inc. | Mobile Communications, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 9/4/2019 | Valiant Solutions, Inc. | Trackforce Inc (nka:Trackforce Valiant) | - | - | - | - | - | - | Software |
| 9/4/2019 | TimeClock Plus, LLC | Providence Equity Partners LLC | - | - | - | - | - | - | Software |
| 9/4/2019 | CollabNet, Inc. | TPG Capital, L.P. | - | - | - | - | - | - | Software |
| 9/4/2019 | ZingBox Inc. | Palo Alto Networks, Inc. (NYSE:PANW) | \$75.0 | - | - | - | - | - | Software |
| 9/4/2019 | 3LOG Systems, Inc. | Trimble Inc. (NasdaqGS:TRMB) | - | - | - | - | - | - | Software |
| 9/4/2019 | New Century Software, Inc. | Mistras Group, Inc. (NYSE:MG) | - | - | - | - | - | - | Software |
| 9/4/2019 | Pareto Captive Services, LLC | Great Hill Partners, LLC | \$80.0 | - | - | - | - | - | Business Process Services |
| 9/4/2019 | Certain Assets of Arcadia Data Inc. | Cloudera, Inc. (NYSE:CLDR) | - | - | - | - | - | - | Business Process Services |
| 9/4/2019 | Beyond IT, Inc. | Xcellence, Inc. | - | - | - | - | - | - | Business Process Services |
| 9/4/2019 | Ace Info Solutions, Inc. | Dovel Technologies, Inc. | - | - | - | - | - | - | Business Process Services |
| 9/4/2019 | Substantially All the Assets of QBA Benefits, LLC | CBIZ, Inc. (NYSE:CBZ) | - | - | - | - | - | - | Business Process Services |
| 9/4/2019 | World Telecom Group, Inc. | Cloud Service Partners, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 9/4/2019 | Cohesion Web Technologies Ltd | Acquia Inc. | - | - | - | - | - | - | Infrastructure Services |
| 9/4/2019 | Nexcess.Net, LLC | Liquid Web Inc. | - | - | - | - | - | - | Infrastructure Services |
| 9/4/2019 | Movere, Inc | Microsoft Corporation (NasdaqGS:MSFT) | - | - | - | - | - | - | Infrastructure Services |
| 9/4/2019 | Hedvig, Inc. | Commvault Systems, Inc. (NasdaqGS:CVLT) | \$225.0 | - | - | - | - | - | Infrastructure Services |
| 9/3/2019 | Radius Intelligence Inc. | Kabbage, Inc. | - | - | - | - | - | - | Information Services |
| 9/3/2019 | Greytwist Data Governance of Greytwist, LLC | SmartRIA, LLC | - | - | - | - | - | - | Software |
| 9/3/2019 | XCommerce Inc. | Otimo Retail Group | - | - | - | - | - | - | Software |
| 9/3/2019 | OSMS Inc. | Edlio, LLC | - | - | - | - | - | - | Software |
| 9/3/2019 | MAM Software Group, Inc. (NasdaqCM:MAMS) | Kerridge Commercial Systems Group Limited | - | - | - | - | - | - | Software |
| 9/3/2019 | PowerHub Corp. | BayWa r.e. renewable energy GmbH | - | - | - | - | - | - | Software |
| 9/3/2019 | Acrobats S.R.O. | Voyant Communications, LLC | - | - | - | - | - | - | Software |
| 9/3/2019 | Annams Systems Corporation, Inc. | CGI Inc. (TSX:GIB.A) | - | - | - | - | - | - | Software |
| 9/3/2019 | Financial Database Services, Inc. | Broadridge Financial Solutions, Inc. (NYSE:BR) | - | - | - | - | - | - | Software |
| 9/3/2019 | Canadian Enerdata Ltd. | S&P Global Platts Inc. | - | - | - | - | - | - | Information Services |
| 9/3/2019 | HireVue, Inc. | The Carlyle Group L.P. | - | - | - | - | - | - | Business Process Services |
| 9/3/2019 | Health & Safety Institute, Inc. | Waud Capital Partners, L.L.C. | - | - | - | - | - | - | Business Process Services |
| 9/2/2019 | Paperlit Inc. | Datrix | - | - | - | - | - | - | Business Process Services |
| 8/30/2019 | Nordic IT, Inc. | Dura software | - | - | - | - | - | - | Software |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|--|---|------------|---------|--------|---------|----------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 8/29/2019 | Dairy, LLC | Banneker Partners, LLC | - | - | - | - | - | - | Software |
| 8/29/2019 | Bitbar Technologies Oy | SmartBear Software Inc. | - | - | - | - | - | - | Software |
| 8/28/2019 | Influenster Inc. | Bazaarvoice, Inc. | - | - | - | - | - | - | Software |
| 8/28/2019 | XynManagement, Inc. | CareDx, Inc (NasdaqGM:CDNA) | - | - | - | - | - | - | Software |
| 8/28/2019 | Pulse Systems, Inc. | CareTracker Inc. | - | - | - | - | - | - | Software |
| 8/28/2019 | Kony, Inc. | Temenos AG (SWX:TEMN) | \$580.0 | - | - | - | - | - | Software |
| 8/28/2019 | MuteSix, Inc. | iProspect, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/28/2019 | Utilitec | Doxim Solutions ULC | - | - | - | - | - | - | Business Process Services |
| 8/28/2019 | U.S. CAD, Inc. | RIB Software SE (XTRA:RIB) | \$44.0 | - | - | - | - | - | Business Process Services |
| 8/28/2019 | Computer Task Group, Incorporated | Assurance Global Services LLC | \$114.3 | 0.3x | 12.8x | \$381.0 | \$8.9 | 2.3% | Business Process Services |
| 8/27/2019 | WebPT, Inc. | Warburg Pincus LLC | - | - | - | - | - | - | Software |
| 8/27/2019 | Apptimize Inc. | Airship, Inc. | - | - | - | - | - | - | Software |
| 8/27/2019 | Certain Assets of MAPADOC | SPS Commerce, Inc. (NasdaqGS:SPSC) | \$11.5 | - | - | - | - | - | Software |
| 8/27/2019 | Medevision Corporation | MetricAid Inc. | - | - | - | - | - | - | Software |
| 8/27/2019 | Symmetry eBanking Suite of Wescom Resources | Connect Financial Software Solutions, LLC | - | - | - | - | - | - | Software |
| 8/27/2019 | Fairway Technologies, Inc. | Accenture plc (NYSE:ACN) | - | - | - | - | - | - | Business Process Services |
| 8/27/2019 | NextPlane Solutions, LLC. | Press Ganey Associates, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/27/2019 | VS Networks, LLC | Spectrio, LLC | - | - | - | - | - | - | Business Process Services |
| 8/27/2019 | The Focal Point Llc | IMS ExpertServices | - | - | - | - | - | - | Business Process Services |
| 8/27/2019 | Fiscal Circles, Inc. | HT Mobile Apps, LLC | - | - | - | - | - | - | Information Services |
| 8/26/2019 | Customer Analytics Technologies Inc. | Cisco Systems, Inc. (NasdaqGS:CSCO) | - | - | - | - | - | - | Software |
| 8/26/2019 | ConveyIQ, Inc. | Entelo, Inc. | - | - | - | - | - | - | Software |
| 8/26/2019 | Software Solutions business of Pitney Bowes Inc. | Starfish Parent, LP | \$700.0 | - | - | - | - | - | Software |
| 8/26/2019 | Travelaer, LLC | PROS Holdings, Inc. (NYSE:PRO) | \$12.0 | - | - | - | - | - | Software |
| 8/26/2019 | Eclipse Cash Systems, LLC | Payment Alliance International, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/26/2019 | Innovative Technology Systems & Solutions, Inc. | ePlus inc. (NasdaqGS:PLUS) | - | - | - | - | - | - | Business Process Services |
| 8/22/2019 | Ontario Systems, LLC | New Mountain Capital, LLC | - | - | - | - | - | - | Software |
| 8/22/2019 | Davisware, Inc. | Serent Capital | - | - | - | - | - | - | Software |
| 8/22/2019 | Pivotal Software, Inc. (NYSE:PVTI) | VMware, Inc. (NYSE:VMW) | \$3,037.4 | 4.4x | - | \$687.5 | -\$129.2 | -18.8% | Software |
| 8/22/2019 | Blue Sombrero LLC/Affinity Sports, LLC | Stack Sports | \$45.0 | - | - | - | - | - | Software |
| 8/22/2019 | CIMPL Inc. | Upland Software, Inc. (NasdaqGM:UPLD) | \$25.7 | - | - | - | - | - | Software |
| 8/22/2019 | Key Assets and Technology of IDS Technology | Monaker Group, Inc. (NasdaqCM:MKGI) | \$4.5 | - | - | - | - | - | Software |
| 8/22/2019 | AutoClerk, Inc. | Best Western International, Inc. | - | - | - | - | - | - | Software |
| 8/22/2019 | Carbon Black, Inc. (NasdaqGS:CBLK) | VMware, Inc. (NYSE:VMW) | \$2,139.7 | 9.3x | - | \$229.7 | -\$65.8 | -28.6% | Software |
| 8/22/2019 | Softrak Systems Inc. | Arcacsoft Corporation | - | - | - | - | - | - | Business Process Services |
| 8/22/2019 | Torres Advanced Enterprise Solutions, LLC | Bootstrap Capital, LLC | - | - | - | - | - | - | Business Process Services |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|--|--|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 8/22/2019 | NTConnections | NuMSP LLC | - | - | - | - | - | - | Business Process Services |
| 8/22/2019 | Ohana Companies Inc. | 360insights.com | - | - | - | - | - | - | Business Process Services |
| 8/21/2019 | Simplicity First Software Pvt. Ltd. | MINDBODY, Inc. | - | - | - | - | - | - | Software |
| 8/21/2019 | Intrinsic | VMware, Inc. (NYSE:VMW) | - | - | - | - | - | - | Infrastructure Services |
| 8/21/2019 | Oil & Gas Systems, Inc. | Quorum Business Solutions, Inc. | - | - | - | - | - | - | Software |
| 8/21/2019 | SignalFx, Inc. | Splunk Inc. (NasdaqGS:SPLK) | \$1,050.0 | - | - | - | - | - | Software |
| 8/21/2019 | Cofense Inc. | BlackRock Private Equity Partners | - | - | - | - | - | - | Software |
| 8/21/2019 | SQData Corporation | Syncsort Incorporated | - | - | - | - | - | - | Software |
| 8/21/2019 | DrillScan SAS | Helmerich & Payne Technologies, LLC | - | - | - | - | - | - | Software |
| 8/21/2019 | BestTransport.com, Inc. | The Descartes Systems Group Inc (TSX:DSG) | \$11.2 | - | - | - | - | - | Software |
| 8/21/2019 | BLUEFIN, LLC | EMEX Holdings, LLC | - | - | - | - | - | - | Business Process Services |
| 8/21/2019 | LeverPoint Management, LLC | Ultimus Fund Solutions, LLC | - | - | - | - | - | - | Business Process Services |
| 8/21/2019 | Perched, LLC | Elastic N.V. (NYSE:ESTC) | - | - | - | - | - | - | Business Process Services |
| 8/21/2019 | Syscom As | DXC Technology Company (NYSE:DXC) | - | - | - | - | - | - | Business Process Services |
| 8/21/2019 | Commingle business of LSC Communications, Inc. | United Business Mail, Inc. | \$11.3 | - | - | - | - | - | Business Process Services |
| 8/20/2019 | Amplifinity, LLC | Impartner Software, Inc. | - | - | - | - | - | - | Software |
| 8/20/2019 | Remedy Partners, Inc. | Signify Health, LLC | - | - | - | - | - | - | Software |
| 8/20/2019 | GroupHigh LLC | Apifia Inc. | - | - | - | - | - | - | Software |
| 8/20/2019 | Method3, Inc. | PredictiveHR, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/20/2019 | Inside Real Estate | Lovell Minnick Partners, LLC | - | - | - | - | - | - | Software |
| 8/19/2019 | jClarity Ltd | Microsoft Corporation (NasdaqGS:MSFT) | - | - | - | - | - | - | Software |
| 8/19/2019 | Assets of SmartZip Analytics Inc. | Constellation Real Estate Group, Inc. | - | - | - | - | - | - | Software |
| 8/19/2019 | RiverMeadow Software, Inc. | CloudScale Capital Partners, LLC | - | - | - | - | - | - | Infrastructure Services |
| 8/19/2019 | PointR Data Inc. | Mateon Therapeutics, Inc. (OTCPK:MATN) | \$6.6 | - | - | - | - | - | Infrastructure Services |
| 8/19/2019 | Internet Marketing Inc. | REQ, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/19/2019 | Cloudware Connections Inc. | A5 Corporation | - | - | - | - | - | - | Business Process Services |
| 8/19/2019 | Benefit Resource Inc. | CIP Capital | - | - | - | - | - | - | Business Process Services |
| 8/19/2019 | InRule Technology, Inc. | OpenGate Capital, LLC | - | - | - | - | - | - | Software |
| 8/19/2019 | U.S. TelePacific Holdings Corp. | Siris Capital Group, LLC | - | - | - | - | - | - | Infrastructure Services |
| 8/19/2019 | Transcend Spatial Solutions, LLC | Rizing, LLC | - | - | - | - | - | - | Information Services |
| 8/19/2019 | Briggs Advertising, Inc. | CD&M Communications | - | - | - | - | - | - | Business Process Services |
| 8/18/2019 | FixStream Network Inc. | Resolve Systems, LLC | \$24.0 | - | - | - | - | - | Software |
| 8/18/2019 | Depot Systems Inc. | Wisetech Global Limited (ASX:WTC) | \$4.8 | 5.5x | 34.4x | \$0.9 | \$0.1 | 15.9% | Software |
| 8/18/2019 | Summit Broadband Inc. | Grain Management, LLC | - | - | - | - | - | - | Infrastructure Services |
| 8/15/2019 | Doxly, Inc. | Freedom Solutions Group, LLC | - | - | - | - | - | - | Software |
| 8/15/2019 | Nextopia Software Corporation | Scaleworks Associates ; Scaleworks Fund II | - | - | - | - | - | - | Software |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|--|--|------------|---------|--------|-----------|---------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 8/15/2019 | TicTasks, Inc. | Upward.net LLC | - | - | - | - | - | - | Business Process Services |
| 8/15/2019 | Strategic Information Resources, Inc. | Data Facts, Inc. | - | - | - | - | - | - | Information Services |
| 8/15/2019 | Plasco, Inc. | Barcodes, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/14/2019 | Presidio, Inc. (NasdaqGS:PSDO) | BC Partners | \$2,312.6 | 0.8x | 10.5x | \$3,047.0 | \$220.0 | 7.2% | Business Process Services |
| 8/14/2019 | WiseStamp Ltd. | vCita, Inc. | - | - | - | - | - | - | Software |
| 8/14/2019 | Metricly, Inc. | Virtual Instruments Corporation | - | - | - | - | - | - | Software |
| 8/14/2019 | InsightSoftware.com Limited | Genstar Capital, LLC | - | - | - | - | - | - | Software |
| 8/14/2019 | InCrowd, Inc. | Saroras Private Capital | - | - | - | - | - | - | Information Services |
| 8/14/2019 | Indecomm Global Services (India) Private Limited | Warburg Pincus LLC | \$200.0 | - | - | - | - | - | Business Process Services |
| 8/14/2019 | TriSource Solutions, L.L.C. | Repay Holdings Corporation (NasdaqCM:RPAY) | \$65.0 | - | - | - | - | - | Business Process Services |
| 8/14/2019 | Benefit Commerce Group LLC | Alera Group, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/14/2019 | Analytics8, LLC | Accenture plc (NYSE:ACN) | - | - | - | - | - | - | Business Process Services |
| 8/13/2019 | Trivest Software Group | ECi Software Solutions, Inc. | - | - | - | - | - | - | Software |
| 8/13/2019 | RegTek Solutions, Inc. | Bloomberg L.P. | - | - | - | - | - | - | Software |
| 8/13/2019 | Qcentive LLC | Apervita, Inc. | - | - | - | - | - | - | Software |
| 8/13/2019 | Comprehend Systems, Inc. | Saama Technologies, Inc. | - | - | - | - | - | - | Software |
| 8/13/2019 | LiquidityEdge LLC | MarketAxess Holdings Inc. (NasdaqGS:MKTIX) | \$150.0 | 16.3x | - | \$9.2 | - | - | Information Services |
| 8/13/2019 | Forest2Market, INC./Fisher International, Inc. | Battery Ventures | - | - | - | - | - | - | Information Services |
| 8/13/2019 | Maverick Cyber-Defense, LLC | Converged Security Solutions | - | - | - | - | - | - | Business Process Services |
| 8/13/2019 | Farm At Hand Inc. | TELUS Corporation (TSX:T) | - | - | - | - | - | - | Software |
| 8/13/2019 | InfSecure Technologies Private Limited | Barracuda Networks, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 8/13/2019 | Focus FS Inc. | Dräger Safety AG & Co. KGaA | - | - | - | - | - | - | Software |
| 8/12/2019 | QxMD Software Inc. | WebMD Health Corp. | - | - | - | - | - | - | Software |
| 8/12/2019 | Sellpoints Inc. | Syndigo LLC | - | - | - | - | - | - | Software |
| 8/12/2019 | Advanced Computer Software Group Limited | BC Partners | - | - | - | - | - | - | Software |
| 8/12/2019 | Alchemy IoT Inc. | Maintenance Assistant Inc. | - | - | - | - | - | - | Software |
| 8/12/2019 | BizEquity, Inc. | American City Business Journals, Inc. | - | - | - | - | - | - | Information Services |
| 8/12/2019 | Belatrix Global Corporation S.A. | Globant S.A. (NYSE:GLOB) | \$65.0 | - | - | - | - | - | Business Process Services |
| 8/12/2019 | Cloudpipes Ltd | QuickBase, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 8/12/2019 | ComputerEase Software and CE Payroll Service | Deltek, Inc. | \$185.0 | - | - | - | - | - | Software |
| 8/9/2019 | Nudge, LLC | Salveo Diagnostics, Inc. | - | - | - | - | - | - | Software |
| 8/9/2019 | Beneco | Ascensus, LLC | - | - | - | - | - | - | Business Process Services |
| 8/8/2019 | iPipeline | Roper Technologies, Inc. (NYSE:ROP) | \$1,625.0 | - | - | - | - | - | Software |
| 8/8/2019 | My Health Direct, Inc. | Experian Health, Inc. | - | - | - | - | - | - | Software |
| 8/8/2019 | Messagera Inc. | Groupon, Inc. (NasdaqGS:GRPN) | - | - | - | - | - | - | Software |
| 8/8/2019 | iCONNECT Development, LLC | NewField Capital Partners, LLC | - | - | - | - | - | - | Software |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | | Segment |
|----------|--|---|------------|---------|--------|-----------|---------|--------|---|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | | |
| 8/8/2019 | Surgical Notes Inc | The CapStreet Group, LLC | - | - | - | - | - | - | - | Software |
| 8/8/2019 | Enterprise Security assets Of Symantec Corporation | Broadcom Inc. (NasdaqGS:AVGO) | \$10,700.0 | 4.6x | 30.6x | \$2,323.0 | \$350.0 | 15.1% | - | Infrastructure Services |
| 8/8/2019 | PharmaSeek LLC | WIRB-Copernicus Group, Inc. | - | - | - | - | - | - | - | Business Process Services |
| 8/8/2019 | ThinkNear, Inc. | inMarket Media LLC | - | - | - | - | - | - | - | Business Process Services |
| 8/8/2019 | Cognitran Ltd. | Snap-on Incorporated (NYSE:SNA) | \$31.0 | - | - | - | - | - | - | Business Process Services |
| 8/7/2019 | ClickSoftware Technologies Ltd. | salesforce.com, inc. (NYSE:CRM) | \$1,350.0 | - | - | - | - | - | - | Software |
| 8/7/2019 | Telecom Technology Services, Inc. | Amdocs Limited (NasdaqGS:DOX) | \$50.0 | - | - | - | - | - | - | Software |
| 8/7/2019 | Sourcery Technology, Inc. | Lavu, Inc. | - | - | - | - | - | - | - | Software |
| 8/7/2019 | eLogic Learning, LLC | Absorb Software Inc. | - | - | - | - | - | - | - | Software |
| 8/7/2019 | Open Dining (nka:Paytronix Order & Delivery) | Paytronix Systems, Inc. | - | - | - | - | - | - | - | Software |
| 8/7/2019 | Aspire Marketing Services, LLC | Staley Capital Management LLC | - | - | - | - | - | - | - | Business Process Services |
| 8/6/2019 | OrgStory LLC | MAGNETIZE, LLC | - | - | - | - | - | - | - | Business Process Services |
| 8/6/2019 | FilmTrack Inc. | City National Bank | - | - | - | - | - | - | - | Software |
| 8/6/2019 | Voicea | Cisco Systems, Inc. (NasdaqGS:CSCO) | - | - | - | - | - | - | - | Software |
| 8/6/2019 | LockPath, Inc. | NAVEX Global, Inc. | - | - | - | - | - | - | - | Software |
| 8/6/2019 | Sagent Auto, LLC | defi SOLUTIONS, Inc. | - | - | - | - | - | - | - | Software |
| 8/6/2019 | Celect, Inc. | NIKE, Inc. (NYSE:NKE) | - | - | - | - | - | - | - | Software |
| 8/6/2019 | Cloud Customer Base of WorkSpace | Altigen Communications, Inc. (OTCPK:ATGN) | - | - | - | - | - | - | - | Infrastructure Services |
| 8/6/2019 | Entuity Ltd. | Park Place Technologies, Inc. | - | - | - | - | - | - | - | Infrastructure Services |
| 8/6/2019 | Nets Holding | Mastercard Incorporated (NYSE:MA) | \$3,125.0 | - | - | - | - | - | - | Business Process Services |
| 8/6/2019 | Pixia Corp. | Cubic Corporation (NYSE:CUB) | \$250.0 | - | - | - | - | - | - | Software |
| 8/5/2019 | Cxense ASA (OB:CXENSE) | Piano Inc. | \$35.9 | 1.9x | - | \$18.7 | -\$6.2 | -33.3% | - | Software |
| 8/5/2019 | GetFeedback, Inc. | SVMK Inc. (NasdaqGS:SVMK) | \$68.0 | - | - | - | - | - | - | Software |
| 8/5/2019 | Geosteering Technologies Ltd. | Tsifra LLC | - | - | - | - | - | - | - | Software |
| 8/5/2019 | SpotFront, Inc. | aQuantive, Inc. | - | - | - | - | - | - | - | Software |
| 8/5/2019 | First Bridge Data LLC | CFRA Research | - | - | - | - | - | - | - | Information Services |
| 8/5/2019 | Growth Pilots, LLC | Wpromote, Inc. | - | - | - | - | - | - | - | Business Process Services |
| 8/5/2019 | Records Access Services Canada, Inc. | CeCors, Inc. (OTCPK:CEOS) | - | - | - | - | - | - | - | Business Process Services |
| 8/5/2019 | Connective DX, Inc. | ProKarma Inc. | - | - | - | - | - | - | - | Business Process Services |
| 8/5/2019 | Robbins-Gioia, LLC | Acorn Growth Companies, LLC | - | - | - | - | - | - | - | Business Process Services |
| 8/5/2019 | Marketing Execution Business of Madden | InnerWorkings, Inc. (NasdaqGS:INWK) | - | - | - | - | - | - | - | Business Process Services |
| 8/5/2019 | Cohesion Corporation | Alta IT Services LLC | - | - | - | - | - | - | - | Business Process Services |
| 8/5/2019 | Northstream AB | Accenture plc (NYSE:ACN) | - | - | - | - | - | - | - | Business Process Services |
| 8/5/2019 | General Dynamics SATCOM Technologies, Inc. | Communications & Power Industries LLC | - | - | - | - | - | - | - | Infrastructure Services |
| 8/5/2019 | Business assets of MapR | Hewlett Packard Enterprise Company (NYSE:HPE) | - | - | - | - | - | - | - | Infrastructure Services |
| 8/4/2019 | Credible Labs Inc. (ASX:CRD) | Fox Corporation (NasdaqGS:FOXA) | \$270.8 | 10.3x | - | \$26.4 | -\$13.5 | -51.0% | - | Information Services |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|---------------------------------------|-------------------------------------|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 8/4/2019 | heidelpay GmbH | KKR & Co. Inc. (NYSE:KKR) | - | - | - | - | - | - | Business Process Services |
| 8/2/2019 | Elemica, Inc. | Eurazeo SE (ENXTPA:RF) | - | - | - | - | - | - | Software |
| 8/2/2019 | Navigant Consulting, Inc. (NYSE:NCI) | Guidehouse LLP | \$1,143.4 | 1.6x | 16.2x | \$728.7 | \$70.8 | 9.7% | Business Process Services |
| 8/2/2019 | Advanced Integrators, Inc. | Njevity, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/1/2019 | RedCard Systems, LLC | Zelis Healthcare Corp | - | - | - | - | - | - | Software |
| 8/1/2019 | Sullivan Data Management, Inc. | Logically, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/1/2019 | iControl ESI | Legility, Inc. | - | - | - | - | - | - | Business Process Services |
| 8/1/2019 | MD Insider, Inc. | Accolade, Inc. | - | - | - | - | - | - | Information Services |
| 8/1/2019 | Planet DDS, Inc. | Level Equity Management, LLC | - | - | - | - | - | - | Software |
| 8/1/2019 | Protech Computer Systems Limited | ClearCourse Partnership LLP | - | - | - | - | - | - | Software |
| 8/1/2019 | The Rainmaker Group Ventures, LLC | Cendyn Corporation | - | - | - | - | - | - | Software |
| 8/1/2019 | Castlight Ltd | Experian | - | - | - | - | - | - | Software |
| 8/1/2019 | Portway International Inc | Avalara, Inc. (NYSE:AVLR) | - | - | - | - | - | - | Business Process Services |
| 8/1/2019 | Vinderbit Pty Ltd. | Shopify Inc. (NYSE:SHOP) | - | - | - | - | - | - | Software |
| 8/1/2019 | Assets of Calgary Data Center of Shaw | eStruxture Data Centers Inc. | - | - | - | - | - | - | Infrastructure Services |
| 8/1/2019 | OpenConnect Systems Incorporated | ActiveOps Limited | - | - | - | - | - | - | Software |
| 8/1/2019 | EdgeWave, Inc. | GoSecure, Inc. | - | - | - | - | - | - | Software |
| 8/1/2019 | Southeast Computer Solutions, Inc. | Net@Work, Inc. | - | - | - | - | - | - | Software |
| 8/1/2019 | Sanderson Group plc (AIM:SND) | Aptean Limited | \$85.6 | 2.5x | 14.5x | \$34.6 | \$5.9 | 17.0% | Software |
| 8/1/2019 | Refinitiv | London Stock Exchange Group plc | \$28,291.5 | - | - | - | - | - | Information Services |
| 8/1/2019 | Think Data Insights, LLC | Lattimore Black Morgan & Cain P.C. | - | - | - | - | - | - | Information Services |
| 8/1/2019 | RigData, Inc. | Drillinginfo, Inc. | - | - | - | - | - | - | Information Services |
| 8/1/2019 | NC4, Inc. | Everbridge, Inc. (NasdaqGM:EVBG) | \$86.8 | - | - | - | - | - | Information Services |
| 8/1/2019 | Knight Point Systems, LLC | Perspecta Inc. (NYSE:PRSP) | \$250.0 | - | - | - | - | - | Business Process Services |
| 8/1/2019 | Peer39 Inc. | O3 Industries LLC | - | - | - | - | - | - | Business Process Services |
| 7/31/2019 | East Valley Data Center | CBRE Global Investors, LLC | \$72.8 | - | - | - | - | - | Infrastructure Services |
| 7/31/2019 | Digita Security LLC | JAMF Software, LLC | - | - | - | - | - | - | Software |
| 7/31/2019 | Leverson GmbH | MRI Software LLC | - | - | - | - | - | - | Software |
| 7/31/2019 | Franklin Energy Services, LLC | ABRY Partners, LLC | - | - | - | - | - | - | Business Process Services |
| 7/31/2019 | CUC Software, Inc. | ServiceTitan, Inc. | - | - | - | - | - | - | Software |
| 7/31/2019 | acompay | American Express Company (NYSE:AXP) | - | - | - | - | - | - | Software |
| 7/31/2019 | MemberXP | CU Solutions Group, Incorporated | - | - | - | - | - | - | Software |
| 7/31/2019 | Gulf Guard Cyber, Inc. | NXTSoft LLC | - | - | - | - | - | - | Software |
| 7/31/2019 | Link Systems, Inc. | MRI Software LLC | - | - | - | - | - | - | Software |
| 7/31/2019 | Decision Dynamics, Inc. | IAA, Inc. (NYSE:IAA) | \$21.1 | - | - | \$8.3 | - | - | Software |
| 7/31/2019 | Armada Logistics, Inc. | Turvo Inc. | - | - | - | - | - | - | Software |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|--|--|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 7/31/2019 | PushSpring, Inc. | T-Mobile US, Inc. (NasdaqGS:TMUS) | - | - | - | - | - | - | Software |
| 7/31/2019 | Realtime Digital Innovations, LLC | Faneuil, Inc. | \$10.0 | - | - | - | - | - | Software |
| 7/31/2019 | Assets and Employees of E8 Storage | Amazon Web Services, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/31/2019 | Veracity Consulting Group, LLC | Resources Connection, Inc. (NasdaqGS:RECN) | \$30.6 | 1.4x | - | \$21.4 | - | - | Business Process Services |
| 7/31/2019 | KRT Marketing, Inc. | Recruitics, LLC | - | - | - | - | - | - | Business Process Services |
| 7/30/2019 | J.D. Power | Thoma Bravo, LLC | - | - | - | - | - | - | Information Services |
| 7/30/2019 | MetaMetrics Inc. | Apax Partners LLP ; The Apax Digital Fund | - | - | - | - | - | - | Information Services |
| 7/30/2019 | Thinkstep AG | Sphera Solutions, Inc. | - | - | - | - | - | - | Software |
| 7/30/2019 | Broadband assets of Eagle Communications, Inc. | Mega Broadband Investments LLC | - | - | - | - | - | - | Infrastructure Services |
| 7/30/2019 | Parity Computing, Inc. | Elsevier B.V. | - | - | - | - | - | - | Software |
| 7/30/2019 | ORIS Intelligence, LLC | PriceSpider | - | - | - | - | - | - | Software |
| 7/30/2019 | Metacog, Inc. | CompTIA TCA Community | - | - | - | - | - | - | Information Services |
| 7/30/2019 | NetXpress LLC | Transaction Network Services, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/30/2019 | Vyve Broadband LLC | Mega Broadband Investments LLC | - | - | - | - | - | - | Infrastructure Services |
| 7/30/2019 | Blue Water | MissionSide, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/29/2019 | SmartBrief, Inc. | Future plc (LSE:FUTR) | \$66.1 | 1.9x | - | \$35.1 | - | - | Information Services |
| 7/29/2019 | Emburse, LLC | Certify Inc. | - | - | - | - | - | - | Software |
| 7/29/2019 | Strategic Legal Solutions/ Compiled | KLDiscovery Ontrack, LLC | - | - | - | - | - | - | Software |
| 7/29/2019 | Assets of Simple Bills Corporation | RealPage, Inc. (NasdaqGS:RP) | - | - | - | - | - | - | Software |
| 7/29/2019 | Waystar, Inc | Canada Pension Plan Investment Board | \$2,700.0 | - | - | - | - | - | Software |
| 7/29/2019 | BlueTalon, Inc. | Microsoft Corporation (NasdaqGS:MSFT) | - | - | - | - | - | - | Software |
| 7/26/2019 | Monotype Imaging Holdings Inc. (NasdaqGS:TYPE) | HGGC, LLC | \$857.8 | 3.5x | 15.7x | \$244.0 | \$54.5 | 22.4% | Software |
| 7/26/2019 | Menya Solutions Inc. | Levio Inc. | - | - | - | - | - | - | Software |
| 7/26/2019 | Data Chief, LLC | Locality Media, Inc. | - | - | - | - | - | - | Information Services |
| 7/25/2019 | Magnus Health, LLC | Veracross LLC | - | - | - | - | - | - | Software |
| 7/25/2019 | Digital Bridge Holdings, LLC | Colony Capital, Inc. (NYSE:CLNY) | \$325.0 | - | - | - | - | - | Infrastructure Services |
| 7/25/2019 | Stratos Management Systems, Inc. | Pensare Acquisition Corp. (NasdaqCM:WRLS) | \$65.0 | - | - | - | - | - | Information Services |
| 7/25/2019 | Risk First Limited | Moody's Corporation (NYSE:MCO) | - | - | - | - | - | - | Software |
| 7/25/2019 | Hybrid Business Solutions, Inc. | Linga POS, LLC | - | - | - | - | - | - | Business Process Services |
| 7/25/2019 | Sococo, Inc. | Think3 ; Think3 Fund | - | - | - | - | - | - | Software |
| 7/25/2019 | Uhana, Inc. | VMware, Inc. (NYSE:VMW) | - | - | - | - | - | - | Software |
| 7/24/2019 | Four Twenty Seven, Inc. | Moody's Investors Service, Inc. | - | - | - | - | - | - | Information Services |
| 7/24/2019 | OAE Software, LLC | Toast, Inc. | - | - | - | - | - | - | Software |
| 7/24/2019 | Field Intelligence, Inc. | Network Innovations Inc. | - | - | - | - | - | - | Software |
| 7/24/2019 | TranSolutions, Inc. | MercuryGate International, Inc. | - | - | - | - | - | - | Software |
| 7/24/2019 | CoAdvantage, Inc. | Aquiline Capital Partners LLC | - | - | - | - | - | - | Business Process Services |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|--|---|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 7/24/2019 | 3Cinteractive, L.L.C. | IMImobile PLC (AIM:IMO) | \$53.1 | 1.6x | 17.7x | \$34.0 | \$3.0 | 8.8% | Software |
| 7/24/2019 | Lighthouse Conferencing LLC | Select Communications LLC | - | - | - | - | - | - | Business Process Services |
| 7/24/2019 | Top Echelon Network Llc | SageLink Capital | - | - | - | - | - | - | Software |
| 7/24/2019 | Osprey Compliance Software LLC | Steele Compliance Solutions, Inc. | - | - | - | - | - | - | Software |
| 7/23/2019 | Root Data Center Inc. | Compass Datacenters LLC | - | - | - | - | - | - | Infrastructure Services |
| 7/23/2019 | Digital Video Networks Inc. | AVI-SPL, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/23/2019 | HigherGround Managed Services, LLC | Ntiva, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/23/2019 | Park Place Technologies, Inc. | Charlesbank Capital Partners, LLC | - | - | - | - | - | - | Infrastructure Services |
| 7/23/2019 | Dreamscape Networks Limited (ASX:DN8) | Web.com Group, Inc. | \$122.3 | 1.8x | 14.1x | \$67.8 | \$8.7 | 12.8% | Infrastructure Services |
| 7/23/2019 | Billy (nka:Sunrise) | Lendio, Inc. | - | - | - | - | - | - | Software |
| 7/23/2019 | Connextra, LLC | Octo Consulting Group, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/23/2019 | Assets of Bixby | Alfred Club, Inc. | - | - | - | - | - | - | Software |
| 7/23/2019 | The Vertex Group | Capital Southwest Corporation (NasdaqGS:CSWC) | - | - | - | - | - | - | Software |
| 7/22/2019 | Bulldog Solutions, Inc. | HERO Digital LLC | - | - | - | - | - | - | Business Process Services |
| 7/22/2019 | QRC, LLC | Parsons Corporation (NYSE:PSN) | \$215.0 | - | - | - | - | - | Software |
| 7/22/2019 | IndustrySafe, Inc. | Vector-Solutions.com, Inc. | - | - | - | - | - | - | Software |
| 7/22/2019 | Keysoft Solutions Ltd. | Transoft Solutions, Inc. | - | - | - | - | - | - | Software |
| 7/19/2019 | Evernex SA | 3i Group plc (LSE:III) | - | - | - | \$220.0 | - | - | Infrastructure Services |
| 7/18/2019 | BitFusion.io Inc. | VMware, Inc. (NYSE:VMW) | - | - | - | - | - | - | Software |
| 7/18/2019 | HighQ Solutions Limited | Thomson Reuters Corporation (TSX:TRI) | - | - | - | - | - | - | Software |
| 7/18/2019 | CFC Technology Corporation, LLC | Urban FT, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/18/2019 | AdvantCo International, LLC | Delvern Capital ; Montage Partners, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/18/2019 | Loop, LLC | Affinitiv, Inc. | - | - | - | - | - | - | Software |
| 7/18/2019 | Three North LLC | Point B Fulfillment Solutions, LLC | - | - | - | - | - | - | Business Process Services |
| 7/17/2019 | payworks GmbH | Visa Inc. (NYSE:V) | - | - | - | - | - | - | Software |
| 7/17/2019 | Wavecell Pte. Ltd. | 8x8, Inc. (NYSE:EGHT) | - | - | - | - | - | - | Software |
| 7/17/2019 | IDScanningLaws.com LLC | IDScan.net | - | - | - | - | - | - | Information Services |
| 7/17/2019 | iKentoo SA | Lightspeed POS Inc. (TSX:LSPD) | - | - | - | - | - | - | Software |
| 7/17/2019 | Fresh Digital Marketing, LLC | Legato Healthcare Marketing, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/16/2019 | Honest Buildings, Inc. | Procore Technologies, Inc. | - | - | - | - | - | - | Software |
| 7/16/2019 | CloudLanes, Inc. | Druva Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/16/2019 | Visible Equity LLC | nCino, Inc. | - | - | - | - | - | - | Software |
| 7/16/2019 | Perengo Inc. | Associates in Advertising Limited | - | - | - | - | - | - | Software |
| 7/16/2019 | Retail Loss Prevention of Verisk Analytics, Inc. | Appriss Inc. | - | - | - | - | - | - | Information Services |
| 7/16/2019 | Spruce Computer Systems Ltd. | ECi Software Solutions, Inc. | - | - | - | - | - | - | Software |
| 7/16/2019 | Windward Software Systems Inc | Volaris Group Inc. | - | - | - | - | - | - | Software |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|-----------|-------------------------------------|---|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 7/16/2019 | OmniComm Systems, Inc. (OTCPK:OMCM) | Anju Software, Inc. | \$77.4 | 3.1x | 43.0x | \$24.6 | \$1.8 | 7.3% | Software |
| 7/16/2019 | Healthline Networks, Inc. | Red Ventures, LLC | - | - | - | - | - | - | Information Services |
| 7/15/2019 | Ugam Interactive Solution Pvt Ltd. | Merkle Inc. | - | - | - | - | - | - | Business Process Services |
| 7/15/2019 | Vungle, Inc. | The Blackstone Group Inc. (NYSE:BX) | - | - | - | - | - | - | Software |
| 7/15/2019 | Simple Energy, Inc. | Tendril Networks, Inc. | - | - | - | - | - | - | Software |
| 7/15/2019 | Givex Mexico | Givex Corporation | - | - | - | - | - | - | Business Process Services |
| 7/15/2019 | SA Ignite, Inc. | SPH Analytics | - | - | - | - | - | - | Software |
| 7/12/2019 | BluePay, Inc. | Lovell Minnick Equity Partners V LP | - | - | - | - | - | - | Business Process Services |
| 7/12/2019 | Mnubo Inc. | Aspen Technology, Inc. (NasdaqGS:AZPN) | \$102.0 | - | - | - | - | - | Software |
| 7/12/2019 | Event Farm, Inc. | MemberSuite, Inc. | - | - | - | - | - | - | Software |
| 7/11/2019 | Probe Information Services, Inc. | Veracity Research Company | - | - | - | - | - | - | Information Services |
| 7/11/2019 | QxBranch, Inc. | Rigetti & Co, Inc. | - | - | - | - | - | - | Information Services |
| 7/11/2019 | Advizr Inc. | Orion Advisor Services, LLC | - | - | - | - | - | - | Software |
| 7/11/2019 | Tier1Net, Inc. | Thrive CITS, LLC | - | - | - | - | - | - | Infrastructure Services |
| 7/11/2019 | CADMIN Services, Inc. | D3 Technical Services, LLC | - | - | - | - | - | - | Software |
| 7/11/2019 | Mammoth, Inc. | ThinkHR Corporation | - | - | - | - | - | - | Software |
| 7/10/2019 | HotSchedules, Inc./ Fourth Ltd | Insight Venture Partners LLC | - | - | - | - | - | - | Software |
| 7/10/2019 | 1WorldSync, Inc. | Battery Ventures | - | - | - | - | - | - | Software |
| 7/10/2019 | QualiTest Ltd. | Bridgepoint Advisers Limited | - | - | - | - | - | - | Software |
| 7/10/2019 | Cloud Academy Inc. | QA Limited | - | - | - | - | - | - | Software |
| 7/10/2019 | Jibestream Inc. | Inpixon Canada, Inc. | \$8.0 | - | - | - | - | - | Software |
| 7/10/2019 | ispionage, Inc. | TapClicks, Inc. | - | - | - | - | - | - | Software |
| 7/10/2019 | Rifiniti, Inc. | FM:Systems, Inc. | - | - | - | - | - | - | Information Services |
| 7/10/2019 | Wayin, Inc. | Cheetah Digital, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/10/2019 | Corepoint Health, LLC | Rhapsody | - | - | - | - | - | - | Software |
| 7/10/2019 | Siege Technologies, LLC | Braes Capital LLC | - | - | - | - | - | - | Software |
| 7/10/2019 | Rhimat Software Ltd | Tidal Software LLC | - | - | - | - | - | - | Software |
| 7/9/2019 | GovQA | Frontier Capital, LLC ; Frontier Fund V | - | - | - | - | - | - | Information Services |
| 7/9/2019 | WayPay Inc. | Royal Bank of Canada (TSX:RY) | - | - | - | - | - | - | Software |
| 7/9/2019 | Eave, Inc. | HomeLight, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/9/2019 | OnGolf, LLC | Deere & Company (NYSE:DE) | - | - | - | - | - | - | Software |
| 7/9/2019 | Elastifile Ltd. | Google LLC | - | - | - | - | - | - | Infrastructure Services |
| 7/9/2019 | Tooso Inc. | Coveo Solutions Inc. | - | - | - | - | - | - | Software |
| 7/9/2019 | CBCInnovis, Inc. | Kroll Factual Data, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/9/2019 | Bowfin Consulting | Rightpoint Consulting, LLC | - | - | - | - | - | - | Infrastructure Services |
| 7/9/2019 | PCS Software, Inc. | Capstreet IV, L.P. ; The CapStreet Group, LLC | - | - | - | - | - | - | Software |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|----------|---|--|------------|---------|--------|---------|--------|--------|---------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 7/9/2019 | Corvil Limited | Pico Quantitative Trading, LLC | - | - | - | - | - | - | Information Services |
| 7/9/2019 | Noveda Technologies, Inc. | ID Global Corporation (OTCPK:IDGC) | - | - | - | - | - | - | Infrastructure Services |
| 7/9/2019 | SafeDK Mobile LTD | AppLovin Corporation | - | - | - | - | - | - | Infrastructure Services |
| 7/9/2019 | Teleset, Inc. (nka:Teleset, a Lanlogic Company) | Lanlogic, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/9/2019 | Red Dog Systems Inc. | Drillinginfo, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/8/2019 | ShiftCentral Inc. | LAC Group, Inc. | - | - | - | - | - | - | Information Services |
| 7/8/2019 | SmartClix, LLC | ZipLine, Inc. | - | - | - | - | - | - | Software |
| 7/8/2019 | Meridian Loyalty | InComm Inc. | - | - | - | - | - | - | Business Process Services |
| 7/8/2019 | Clarus Commerce, LLC | Marlin Equity Partners, LLC | - | - | - | - | - | - | Business Process Services |
| 7/8/2019 | JAGGAER, Inc. | Cinven Limited | - | - | - | - | - | - | Software |
| 7/4/2019 | Zycomp Systems Limited | Acturis Limited | - | - | - | - | - | - | Software |
| 7/3/2019 | Perspective Partners, LLC | Manning Partners, LLC | - | - | - | - | - | - | Information Services |
| 7/3/2019 | Corel Corporation | KKR & Co. Inc. (NYSE:KKR) | - | - | - | - | - | - | Software |
| 7/3/2019 | Nordisk Systems, Inc. | Converge Technology Solutions Corp. (TSXV:CTS) | \$9.5 | 0.5x | 6.3x | \$19.3 | \$1.5 | 7.8% | Infrastructure Services |
| 7/3/2019 | Revon Systems, LLC | ZYUS Life Sciences Inc | - | - | - | - | - | - | Software |
| 7/3/2019 | COMgroup Inc. | Ross & Baruzzini, Inc. | - | - | - | - | - | - | Information Services |
| 7/2/2019 | Vexata, Inc. | StorCentric, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/2/2019 | D3 Technology Inc. | NCR Corporation (NYSE:NCR) | - | - | - | - | - | - | Software |
| 7/2/2019 | Pacsoft Australia Pty Ltd. | ECi Software Solutions, Inc. | - | - | - | - | - | - | Software |
| 7/2/2019 | QDiscovery LLC | Xcellence, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/2/2019 | DocuWare GmbH | Ricoh Company, Ltd. (TSE:7752) | - | - | - | - | - | - | Information Services |
| 7/2/2019 | Orange Legal, Inc. | Veritext Corp | - | - | - | - | - | - | Business Process Services |
| 7/2/2019 | Sunray Technology Ventures, Inc. | Single Digits, Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/2/2019 | Optima Healthcare Solutions, LLC | Net Health Systems, Inc. | - | - | - | - | - | - | Business Process Services |
| 7/2/2019 | ONE11 ADVISORS | Altus Group Limited (TSX:AIF) | - | - | - | - | - | - | Business Process Services |
| 7/2/2019 | PGFM Solutions, LLC | Gryphon Technologies LC | - | - | - | - | - | - | Infrastructure Services |
| 7/2/2019 | Majure Data Inc. | Epicor Software Corporation | - | - | - | - | - | - | Software |
| 7/2/2019 | Paydayta, Inc. (nka:CBIZ Paytime) | CBIZ, Inc. (NYSE:CBZ) | - | - | - | - | - | - | Business Process Services |
| 7/2/2019 | SkyFormation Ltd. | Exabeam, Inc. | - | - | - | - | - | - | Software |
| 7/2/2019 | Synergy Business Solutions, Inc. | Velosio | - | - | - | - | - | - | Infrastructure Services |
| 7/2/2019 | Evolium Technologies S.L.U | Certified Security Solutions, Inc. | - | - | - | - | - | - | Software |
| 7/2/2019 | Open Storage Solutions, Inc. | iVedha Inc. | - | - | - | - | - | - | Infrastructure Services |
| 7/1/2019 | HEXONET Services Inc. | CentralNic Group Plc (AIM:CNIC) | \$11.3 | 0.6x | - | \$18.6 | - | - | Infrastructure Services |
| 7/1/2019 | Management Information Tools, Inc. | Eden Capital Management LLC | - | - | - | - | - | - | Software |
| 7/1/2019 | DebtFolio, Inc. | Jack Henry & Associates, Inc. (NasdaqGS:JKHY) | - | - | - | - | - | - | Software |
| 7/1/2019 | intY Limited | ScanSource, Inc. (NasdaqGS:SCSC) | - | - | - | - | - | - | Infrastructure Services |

Select M&A Transactions (Cont'd)

| Date | Target | Acquirer | Enterprise | EV/ | | Revenue | EBITDA | EBITDA | Segment |
|----------|----------------------------------|--|------------|---------|--------|---------|--------|--------|-------------------------|
| | | | Value | Revenue | EBITDA | | | Margin | |
| 7/1/2019 | GBST Holdings Limited (ASX:GBT) | SS&C Technologies Holdings, Inc. (NasdaqGS:SSNC) | \$168.5 | 2.7x | 21.9x | \$62.9 | \$7.7 | 12.2% | Software |
| 7/1/2019 | OpenTempo, Inc. | QGenda, LLC | - | - | - | - | - | - | Software |
| 7/1/2019 | Appcast, Inc. | StepStone Deutschland GmbH | \$92.7 | - | - | - | - | - | Software |
| 7/1/2019 | trinus | DHI Telecom Group | - | - | - | - | - | - | Infrastructure Services |
| 7/1/2019 | EPAC Software Technologies, Inc. | JDM Technology Group Inc. | - | - | - | - | - | - | Software |

ABOUT CHERRY TREE & ASSOCIATES

Cherry Tree & Associates Overview

Cherry Tree & Associates provides a broad array of M&A advisory services to owner-operators, private equity firms, corporations, management teams and public companies.

M&A Services



- Sell-side Advisory
- Recapitalizations
- Non-core Divestitures
- Management-led Buyouts
- Buy-side Advisory

Highlights

- Based on over 30 years of growing and advising hundreds of entrepreneurial companies
- Been advisor or principal in more than 300 transactions
- Completed over \$3 billion in transactions in the past 10 years
- Expertise in multiple industries
- Experience completing transactions globally
- Cherry Tree professionals have closed deals with leading private equity and venture capital firms
- 13 M&A professionals

RECENT M&A ENGAGEMENTS

Sell-side Advisory


Acquired by

SALE TO A STRATEGIC


Acquired by

A Portfolio Company of

SALE TO A STRATEGIC


Analysts International Corporation
(NASDAQ:ANLY)
Acquired by

SALE TO A STRATEGIC


Acquired by

SALE TO A STRATEGIC

Recapitalizations


Acquired by

SALE TO PRIVATE EQUITY


Non-core Divestitures


A joint venture of
Animal Health
and



has sold its dairy hygiene chemical business to

SALE TO A STRATEGIC

Management-led Buyouts


Recapitalization and management-led buyout
RECAPITALIZATION

Buy-side Advisory


Acquired

STRATEGIC ADVISORY

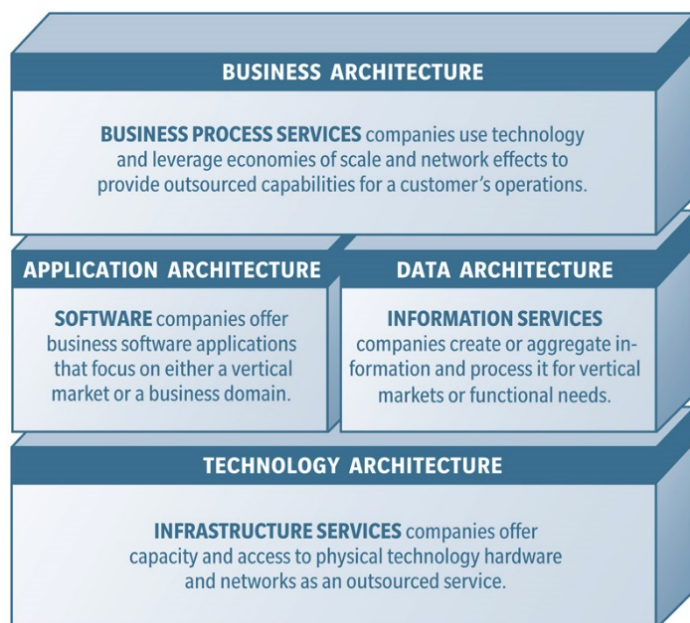

Acquired

STRATEGIC ADVISORY



















TEBS Expertise

Cherry Tree has been tracking trends and activity in the Technology Enabled Business Services (TEBS) space for more than 15 years. TEBS companies are defined as those that:

- Offer a solution, product or service that is delivered or enhanced via technology
- Generate revenue primarily from other businesses (“B2B”)
- Use their own intellectual property to differentiate their solution



SELECT TRANSACTIONS

| | | |
|--|--|---|
|  Acquired by  A Portfolio Company of THE HIGBO GROUP SALE TO A STRATEGIC |  WAUSAU A DELUXE COMPANY Acquired the remittance processing business of First Data STRATEGIC ADVISORY |  Has Partnered With N E P Norwest Equity Partners PRIVATE EQUITY TRANSACTION |
|  Welcomes as an Equity Partner  SALE TO PRIVATE EQUITY |  Acquired  STRATEGIC ADVISORY |  Acquired  STRATEGIC ADVISORY |
|   Acquired by  SALE TO A STRATEGIC | Marquette Companies The operating group of  Has completed the sale of  to LaSalle Capital  SALE TO PRIVATE EQUITY |  (OTC:CTIG) Acquired by  SALE TO A STRATEGIC |

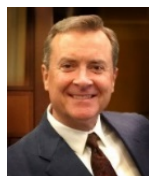
Cherry Tree TEBS Team

Each of our senior investment bankers has many years of transaction experience as either an operating executive or private equity professional, in addition to deep investment banking experience.



Mik Gusenius
Director

- Joined Cherry Tree & Associates in 2007
- Over 10 years of middle market investment banking experience
- Completed more than 30 M&A transactions totaling more than \$1 billion of transaction value
- B.A., Economics, Gustavus Adolphus College
- M.B.A., University of Minnesota – Carlson School of Management



Elmer Baldwin
*Senior Executive
Director*

- Joined Cherry Tree & Associates in 2015
- Previously the President and CEO of five information technology companies (20 years)
- Strategic advisor and consultant to over 100 companies over last 30+ years
- Experience working with publicly-traded companies, private-equity syndicates, and owner-operator situations
- B.B.A., Finance, Loyola Marymount University



Dave Latzke
Managing Director

- Joined Cherry Tree & Associates in 2007
- Previously the CFO for two publicly-traded enterprise software companies (13 years)
- Previously with Arthur Andersen (11 years)
- B.A., Accounting, University of Northern Iowa
- Certified Public Accountant (inactive)



Merritt Jackley
Vice President

- Joined Cherry Tree & Associates in 2019
- Has 7 years of investment banking experience and has completed over 20 M&A transactions
- Previously with Vermillion Capital in Minneapolis and Keefe, Bruyette & Woods (A Stifel Company) in New York
- B.A., History, Colgate University



Tom Astrup
Senior Analyst

- Joined Cherry Tree & Associates in 2019
- Previous audit and transaction advisory experience with PricewaterhouseCoopers and Dixon Hughes Goodman
- B.S., Finance and Accounting, University of Minnesota – Carlson School of Management
- Certified Public Accountant

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