



HOULIHAN  
CAPITAL

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Industry Observations – March 31, 2019

## Business Services Industry

## Select Business Services Public Company Industry Data As of March 31, 2019

(USD in millions, except per share data)

(\$USD in millions, except per share data)

| Company Name  | Ticker | Market Data       |                   |              |                  |                      | LTM Operating Data |             |            | Forward Estimates        |                         |
|---|--------|-------------------|-------------------|--------------|------------------|----------------------|--------------------|-------------|------------|--------------------------|-------------------------|
|   |        | Price at 03/31/19 | % of 52 Week High | Equity Value | Enterprise Value | Debt / Total Capital | Total Assets       | LTM Revenue | LTM EBITDA | CY 2019 Revenue Estimate | CY 2019 EBITDA Estimate |
| Advertising   |        |                   |                   |              |                  |                      |                    |             |            |                          |                         |
| Omnicom Group Inc.  | OMC    | \$ 72.99          | 92.7%             | \$ 16,327.2  | \$ 18,418.0      | 68.8%                | \$ 25,211.2        | \$ 15,129.5 | \$ 2,341.4 | \$15,013.85              | \$2,368.15              |
| The Interpublic Group of Companies, Inc.  | IPG    | \$ 21.01          | 81.5%             | \$ 8,087.0   | \$ 11,355.1      | 58.9%                | \$ 15,620.3        | \$ 8,031.6  | \$ 1,240.2 | \$8,626.69               | \$1,439.41              |
| Lamar Advertising Company (REIT)  | LAMR   | \$ 79.26          | 98.2%             | \$ 7,893.0   | \$ 10,760.2      | 71.8%                | \$ 4,544.6         | \$ 1,627.2  | \$ 693.1   | \$1,742.86               | \$768.46                |
| Clear Channel Outdoor Holdings, Inc.  | CCO    | \$ 5.35           | 83.9%             | \$ 1,955.9   | \$ 7,210.1       | 166.2%               | \$ 4,522.0         | \$ 2,721.7  | \$ 578.5   | \$2,732.24               | \$625.02                |
| Consumer Credit Reporting, Mercantile Reporting, and Adjustment and Collection Agency |        |                   |                   |              |                  |                      |                    |             |            |                          |                         |
| S&P Global Inc.   | SPGI   | \$ 210.55         | 96.9%             | \$ 51,812.4  | \$ 55,215.4      | 61.4%                | \$ 9,458.0         | \$ 6,258.0  | \$ 3,167.0 | \$6,538.12               | \$3,310.83              |
| Moody's Corporation   | MCO    | \$ 181.09         | 96.3%             | \$ 34,191.6  | \$ 38,252.0      | 89.6%                | \$ 9,526.2         | \$ 4,442.7  | \$ 2,108.1 | \$4,661.57               | \$2,238.08              |
| Equifax Inc.  | EFX    | \$ 118.50         | 85.4%             | \$ 14,381.8  | \$ 16,841.6      | 45.5%                | \$ 7,153.2         | \$ 3,412.1  | \$ 744.3   | \$3,489.92               | \$1,187.45              |
| DNB ASA   | DNB    | \$ 18.43          | 91.2%             | \$ 29,283.2  | \$ -             | 0.0%                 | \$304,025.0        | \$ 5,888.6  | NA         | \$54,190.93              | \$0.00                  |
| Services to Dwellings and Other Buildings   |        |                   |                   |              |                  |                      |                    |             |            |                          |                         |
| Rollins, Inc.   | ROL    | \$ 41.62          | 96.9%             | \$ 13,631.8  | \$ 13,516.3      | 0.0%                 | \$ 1,094.1         | \$ 1,821.6  | \$ 374.3   | \$2,019.76               | \$425.52                |
| Healthcare Services Group, Inc.   | HCSG   | \$ 32.99          | 67.7%             | \$ 2,442.4   | \$ 2,370.1       | 6.4%                 | \$ 692.6           | \$ 2,008.8  | \$ 109.5   | \$2,024.55               | \$152.32                |
| ABM Industries Incorporated   | ABM    | \$ 36.35          | 97.3%             | \$ 2,407.8   | \$ 3,371.1       | 40.5%                | \$ 3,686.4         | \$ 6,461.8  | \$ 295.8   | \$6,637.18               | \$341.43                |
| Miscellaneous Equipment Rental and Leasing  |        |                   |                   |              |                  |                      |                    |             |            |                          |                         |
| United Rentals, Inc.  | URI    | \$ 114.25         | 62.9%             | \$ 9,002.2   | \$ 20,706.2      | 78.4%                | \$ 18,586.0        | \$ 8,430.0  | \$ 2,459.0 | \$9,328.54               | \$4,465.39              |
| Aaron's, Inc.   | AAN    | \$ 52.60          | 93.9%             | \$ 3,565.1   | \$ 3,974.6       | 19.4%                | \$ 2,826.7         | \$ 3,828.9  | \$ 562.3   | \$3,979.77               | \$431.86                |
| TAL Education Group   | TAL    | \$ 36.08          | 75.8%             | \$ 20,467.9  | \$ 19,118.0      | 11.9%                | \$ 3,427.1         | \$ 2,340.5  | \$ 372.2   | \$3,207.81               | \$583.96                |
| Apollo Power Ltd  | APLP   | \$ 0.27           | 34.0%             | \$ 3.3       | \$ 2.3           | 0.0%                 | \$ 1.7             | \$ -        | \$ (2.0)   | \$0.00                   | \$0.00                  |
| Rent-A-Center, Inc.   | RCII   | \$ 20.87          | 91.7%             | \$ 1,126.5   | \$ 1,511.2       | 65.3%                | \$ 1,396.9         | \$ 2,660.5  | \$ 184.4   | \$2,617.59               | \$233.12                |
| Personnel Supply Services   |        |                   |                   |              |                  |                      |                    |             |            |                          |                         |
| ManpowerGroup Inc.  | MAN    | \$ 82.69          | 69.1%             | \$ 4,964.7   | \$ 5,521.8       | 34.0%                | \$ 8,817.0         | \$ 21,513.7 | \$ 866.9   | \$21,435.20              | \$831.66                |
| Robert Half International Inc.  | RHI    | \$ 65.16          | 81.5%             | \$ 7,625.5   | \$ 7,349.6       | 0.1%                 | \$ 1,903.1         | \$ 5,800.3  | \$ 653.2   | \$6,178.14               | \$697.58                |
| ASGN Incorporated   | ASGN   | \$ 63.49          | 67.4%             | \$ 3,343.1   | \$ 4,401.7       | 48.2%                | \$ 2,687.9         | \$ 3,399.8  | \$ 371.7   | \$3,867.06               | \$453.05                |
| Korn Ferry  | KFY    | \$ 44.78          | 64.9%             | \$ 2,526.9   | \$ 2,261.3       | 15.6%                | \$ 2,217.6         | \$ 1,910.6  | \$ 284.7   | \$2,008.18               | \$321.15                |
| TrueBlue, Inc.  | TBI    | \$ 23.64          | 79.2%             | \$ 916.2     | \$ 949.3         | 11.9%                | \$ 1,114.8         | \$ 2,499.2  | \$ 121.6   | \$2,546.29               | \$121.15                |

Notes: LTM (latest twelve months); Enterprise Value (market capitalization less total cash and short-term investments plus short-term borrowings and total long-term debt); EBITDA (earnings before interest, taxes, depreciation and amortization)

Source: Capital IQ

The material contained in this publication is meant to provide general information regarding valuation topics. This publication does not constitute investment advice with respect to the securities of any company discussed herein, is not intended to provide information upon which to base an investment decision, and should not be construed as such. Professional advice should be obtained before taking any action based on the information contained herein.

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## Select Business Services Public Company Industry Data As of March 31, 2019

(USD in millions, except per share data)

| Company Name   | Ticker | Market Data       |                   |              |                  |                      | LTM Operating Data |             |            | Forward Estimates        |                         |
|--|--------|-------------------|-------------------|--------------|------------------|----------------------|--------------------|-------------|------------|--------------------------|-------------------------|
|  |        | Price at 03/31/19 | % of 52 Week High | Equity Value | Enterprise Value | Debt / Total Capital | Total Assets       | LTM Revenue | LTM EBITDA | CY 2019 Revenue Estimate | CY 2019 EBITDA Estimate |
| Computer Programming, Data Processing, and Other Computer Related Services |        |                   |                   |              |                  |                      |                    |             |            |                          |                         |
| Alphabet Inc.  | GOOG   | \$1,173.31        | 92.1%             | \$816,907.5  | \$711,779.5      | 2.2%                 | \$232,792.0        | \$136,819.0 | \$40,421.0 | \$163,493.34             | \$58,883.89             |
| Microsoft Corporation  | MSFT   | \$ 117.94         | 97.6%             | \$904,860.9  | \$862,670.9      | 48.1%                | \$258,859.0        | \$118,459.0 | \$49,581.0 | \$129,987.28             | \$55,516.78             |
| International Business Machines Corporation                                | IBM    | \$ 141.10         | 87.1%             | \$125,560.1  | \$159,580.1      | 76.8%                | \$130,926.0        | \$ 78,701.0 | \$17,348.0 | \$77,324.43              | \$18,968.36             |
| Facebook, Inc.   | FB     | \$ 166.69         | 76.2%             | \$475,731.6  | \$435,117.6      | 0.6%                 | \$ 97,334.0        | \$ 55,838.0 | \$29,228.0 | \$68,940.37              | \$36,529.32             |
| Oracle Corporation   | ORCL   | \$ 53.71          | 98.8%             | \$183,562.2  | \$200,421.2      | 69.9%                | \$109,438.0        | \$ 39,831.0 | \$16,336.0 | \$39,689.34              | \$18,526.25             |
| eBay Inc.  | EBAY   | \$ 37.14          | 86.4%             | \$ 33,978.7  | \$ 38,304.7      | 59.5%                | \$ 22,819.0        | \$ 10,746.0 | \$ 3,004.0 | \$10,857.80              | \$3,763.67              |
| Booking Holdings Inc.  | BKNG   | \$1,744.91        | 79.2%             | \$ 78,543.2  | \$ 80,933.2      | 49.7%                | \$ 22,687.0        | \$ 14,527.0 | \$ 5,780.0 | \$15,558.99              | \$6,006.52              |
| VMware, Inc.   | VMW    | \$ 180.51         | 95.8%             | \$ 74,088.7  | \$ 75,481.7      | 88.5%                | \$ 14,662.0        | \$ 8,974.0  | \$ 2,428.0 | \$10,039.10              | \$3,929.24              |
| Automatic Data Processing, Inc.  | ADP    | \$ 159.74         | 99.9%             | \$ 69,587.5  | \$ 70,006.8      | 40.2%                | \$ 38,806.3        | \$ 13,839.4 | \$ 3,231.5 | \$14,668.10              | \$3,573.84              |
| Adobe Inc.   | ADBE   | \$ 266.49         | 96.0%             | \$130,034.0  | \$130,943.7      | 29.5%                | \$ 19,505.5        | \$ 9,552.0  | \$ 3,247.3 | \$11,169.81              | \$5,028.71              |
| Cognizant Technology Solutions Corporation                                 | CTSH   | \$ 72.45          | 86.9%             | \$ 41,665.9  | \$ 37,899.9      | 6.1%                 | \$ 15,913.0        | \$ 16,125.0 | \$ 3,320.0 | \$17,349.16              | \$3,752.13              |
| Intuit Inc.  | INTU   | \$ 261.41         | 99.9%             | \$ 67,724.3  | \$ 66,804.3      | 12.9%                | \$ 5,335.0         | \$ 6,233.0  | \$ 1,779.0 | \$6,924.58               | \$2,483.67              |
| Cerner Corporation   | CERN   | \$ 57.21          | 84.7%             | \$ 18,556.7  | \$ 18,225.0      | 8.3%                 | \$ 6,708.6         | \$ 5,366.3  | \$ 1,207.1 | \$5,742.14               | \$1,699.60              |
| Fidelity National Information Services, Inc.                               | FIS    | \$ 113.10         | 99.8%             | \$ 36,546.5  | \$ 44,835.5      | 46.8%                | \$ 23,770.0        | \$ 8,423.0  | \$ 2,382.0 | \$8,409.35               | \$3,265.96              |
| Fiserv, Inc.   | FISV   | \$ 88.28          | 99.6%             | \$ 34,569.3  | \$ 40,113.3      | 72.2%                | \$ 11,262.0        | \$ 5,823.0  | \$ 1,898.0 | \$6,188.50               | \$2,359.43              |
| Carrefour SA   | CA     | \$ 18.69          | 91.6%             | \$ 14,571.9  | \$ 27,481.0      | 55.0%                | \$ 54,245.5        | \$ 88,679.9 | \$ 3,918.0 | \$77,256.31              | \$3,621.05              |
| TripAdvisor, Inc.  | TRIP   | \$ 51.45          | 74.6%             | \$ 7,107.1   | \$ 6,520.1       | 5.3%                 | \$ 2,167.0         | \$ 1,615.0  | \$ 237.0   | \$1,737.05               | \$472.69                |
| Symantec Corporation   | SYMC   | \$ 22.99          | 78.7%             | \$ 14,695.6  | \$ 17,161.6      | 46.1%                | \$ 16,456.0        | \$ 4,752.0  | \$ 994.0   | \$4,906.91               | \$2,235.39              |
| Activision Blizzard, Inc.  | ATVI   | \$ 45.53          | 53.8%             | \$ 34,777.4  | \$ 33,073.4      | 19.0%                | \$ 17,835.0        | \$ 7,500.0  | \$ 2,507.0 | \$6,406.96               | \$2,393.49              |
| Xerox Corporation  | XRX    | \$ 31.98          | 96.7%             | \$ 7,307.6   | \$ 11,701.6      | 49.9%                | \$ 14,874.0        | \$ 9,830.0  | \$ 1,387.0 | \$9,309.18               | \$1,706.02              |
| Miscellaneous Business Services  |        |                   |                   |              |                  |                      |                    |             |            |                          |                         |
| Alliance Data Systems Corporation  | ADS    | \$ 174.98         | 69.9%             | \$ 9,273.5   | \$ 30,593.7      | 91.5%                | \$ 30,387.7        | \$ 7,791.2  | \$ 1,864.2 | \$7,966.26               | \$2,022.96              |
| ADT Inc.   | ADT    | \$ 6.39           | 64.9%             | \$ 4,834.7   | \$ 14,473.8      | 70.3%                | \$ 17,208.6        | \$ 4,581.7  | \$ 2,275.9 | \$5,009.95               | \$2,469.55              |
| Total System Services, Inc.  | TSS    | \$ 95.01          | 94.6%             | \$ 16,854.9  | \$ 20,302.4      | 60.2%                | \$ 7,468.7         | \$ 4,028.2  | \$ 1,122.8 | \$4,065.75               | \$1,453.96              |
| Sotheby's  | BID    | \$ 37.75          | 62.7%             | \$ 1,749.8   | \$ 2,504.5       | 67.9%                | \$ 2,689.1         | \$ 1,035.7  | \$ 224.0   | \$1,020.98               | \$246.80                |
| Shutterfly, Inc.   | SFLY   | \$ 40.64          | 40.5%             | \$ 1,384.5   | \$ 2,038.6       | 64.2%                | \$ 2,302.2         | \$ 1,961.8  | \$ 271.9   | \$2,153.81               | \$325.08                |
| Cardtronics plc  | CATM   | \$ 35.58          | 91.0%             | \$ 1,646.0   | \$ 2,419.9       | 68.5%                | \$ 1,787.3         | \$ 1,345.2  | \$ 277.0   | \$1,332.68               | \$287.60                |
| TTEC Holdings, Inc.  | TTEC   | \$ 36.23          | 96.5%             | \$ 1,674.2   | \$ 1,885.6       | 44.4%                | \$ 1,054.5         | \$ 1,509.2  | \$ 168.8   | \$1,620.06               | \$205.17                |

Notes: LTM (latest twelve months); Enterprise Value (market capitalization less total cash and short-term investments plus short-term borrowings and total long-term debt);

EBITDA (earnings before interest, taxes, depreciation and amortization)

Source: Capital IQ

## Select Business Services Public Company Valuation Metrics As of March 31, 2019

(USD in millions, except per share data)

| Company Name  | Ticker | LTM Operating Statistics |                        |                         |                   |                  |                  | Trading Multiples      |                            |                       |                           |
|---|--------|--------------------------|------------------------|-------------------------|-------------------|------------------|------------------|------------------------|----------------------------|-----------------------|---------------------------|
|   |        | Return<br>On<br>Assets   | Return<br>On<br>Equity | Return<br>On<br>Capital | Revenue<br>Growth | EBITDA<br>Growth | EBITDA<br>Margin | TEV/<br>LTM<br>Revenue | TEV/<br>CY 2018<br>Revenue | TEV/<br>LTM<br>EBITDA | TEV/<br>CY 2018<br>EBITDA |
| Advertising   |        |                          |                        |                         |                   |                  |                  |                        |                            |                       |                           |
| Omnicom Group Inc.  | OMC    | 5.4%                     | 43.3%                  | 13.9%                   | -1.2%             | -0.1%            | 15.5%            | 1.2x                   | 1.2x                       | 7.9x                  | 7.8x                      |
| The Interpublic Group of Companies, Inc.  | IPG    | 4.6%                     | 25.0%                  | 12.7%                   | 7.5%              | 14.6%            | 15.4%            | 1.4x                   | 1.3x                       | 9.2x                  | 7.9x                      |
| Lamar Advertising Company (REIT)  | LAMR   | 6.7%                     | 27.3%                  | 7.6%                    | 5.6%              | 4.7%             | 42.6%            | 6.6x                   | 6.2x                       | 15.5x                 | 14.0x                     |
| Clear Channel Outdoor Holdings, Inc.  | CCO    | 3.5%                     | NM                     | 4.9%                    | 5.1%              | 7.4%             | 21.3%            | 2.6x                   | 2.6x                       | 12.5x                 | 11.5x                     |
|   | Mean   | 5.0%                     | 31.9%                  | 9.8%                    | 4.2%              | 6.6%             | 23.7%            | 3.0x                   | 2.8x                       | 11.3x                 | 10.3x                     |
|   | Median | 5.0%                     | 27.3%                  | 10.2%                   | 5.4%              | 6.0%             | 18.4%            | 2.0x                   | 2.0x                       | 10.8x                 | 9.7x                      |
| Consumer Credit Reporting, Mercantile Reporting, and Adjustment and Collection Agency |        |                          |                        |                         |                   |                  |                  |                        |                            |                       |                           |
| S&P Global Inc.   | SPGI   | 19.6%                    | 95.9%                  | 31.8%                   | 3.2%              | 8.1%             | 50.6%            | 8.8x                   | 8.4x                       | 17.4x                 | 16.7x                     |
| Moody's Corporation   | MCO    | 13.2%                    | 487.2%                 | 20.4%                   | 5.7%              | 5.9%             | 47.5%            | 8.6x                   | 8.2x                       | 18.1x                 | 17.1x                     |
| Equifax Inc.  | EFX    | 3.7%                     | 9.6%                   | 4.6%                    | 1.5%              | -30.1%           | 21.8%            | 4.9x                   | 4.8x                       | 22.6x                 | 14.2x                     |
| DNB ASA   | DNB    | 0.9%                     | 11.1%                  | 0.0%                    | 3.2%              | NM               | #VALUE!          | 0.0x                   | 0.0x                       | N/A                   | N/A                       |
|   | Mean   | 9.4%                     | 151.0%                 | 14.2%                   | 3.4%              | -5.4%            | #VALUE!          | 5.6x                   | 5.4x                       | 19.4x                 | 16.0x                     |
|   | Median | 8.5%                     | 53.5%                  | 12.5%                   | 3.2%              | 5.9%             | #VALUE!          | 6.8x                   | 6.5x                       | 18.1x                 | 16.7x                     |
| Services to Dwellings and Other Buildings   |        |                          |                        |                         |                   |                  |                  |                        |                            |                       |                           |
| Rollins, Inc.   | ROL    | 18.2%                    | 33.9%                  | 28.3%                   | 8.8%              | 7.1%             | 20.5%            | 7.4x                   | 6.7x                       | 36.1x                 | 31.8x                     |
| Healthcare Services Group, Inc.   | HCSG   | 9.2%                     | 19.9%                  | 13.8%                   | 7.6%              | -19.3%           | 5.5%             | 1.2x                   | 1.2x                       | 21.6x                 | 15.6x                     |
| ABM Industries Incorporated   | ABM    | 3.1%                     | 5.6%                   | 4.6%                    | 13.1%             | 30.4%            | 4.6%             | 0.5x                   | 0.5x                       | 11.4x                 | 9.9x                      |
|   | Mean   | 10.1%                    | 19.8%                  | 15.6%                   | 9.8%              | 6.0%             | 10.2%            | 3.0x                   | 2.8x                       | 23.0x                 | 19.1x                     |
|   | Median | 9.2%                     | 19.9%                  | 13.8%                   | 8.8%              | 7.1%             | 5.5%             | 1.2x                   | 1.2x                       | 21.6x                 | 15.6x                     |
| Miscellaneous Equipment Rental and Leasing  |        |                          |                        |                         |                   |                  |                  |                        |                            |                       |                           |
| United Rentals, Inc.  | URI    | 8.0%                     | 33.8%                  | 9.5%                    | 20.1%             | 20.5%            | 29.2%            | 2.5x                   | 2.2x                       | 8.4x                  | 4.6x                      |
| Aaron's, Inc.   | AAN    | 10.9%                    | 11.2%                  | 14.1%                   | 13.2%             | 13.5%            | 14.7%            | 1.0x                   | 1.0x                       | 7.1x                  | 9.2x                      |
| TAL Education Group   | TAL    | 6.1%                     | 24.0%                  | 11.2%                   | 53.3%             | 61.9%            | 15.9%            | 8.2x                   | 6.0x                       | 51.4x                 | 32.7x                     |
| Apollo Power Ltd  | APLP   | -70.2%                   | -137.8%                | -86.0%                  | 0.0%              | NM               | 0.0%             | N/A                    | N/A                        | -1.1x                 | N/A                       |
| Rent-A-Center, Inc.   | RCII   | 5.1%                     | 3.0%                   | 8.1%                    | -1.6%             | 160.3%           | 6.9%             | 0.6x                   | 0.6x                       | 8.2x                  | 6.5x                      |
|   | Mean   | -8.0%                    | -13.2%                 | -8.6%                   | 17.0%             | 64.0%            | 13.3%            | 3.1x                   | 2.4x                       | 14.8x                 | 13.3x                     |
|   | Median | 6.1%                     | 11.2%                  | 9.5%                    | 13.2%             | 41.2%            | 14.7%            | 1.7x                   | 1.6x                       | 8.2x                  | 7.8x                      |
| Personnel Supply Services   |        |                          |                        |                         |                   |                  |                  |                        |                            |                       |                           |
| ManpowerGroup Inc.  | MAN    | 5.5%                     | 18.4%                  | 12.4%                   | -1.3%             | -7.0%            | 4.0%             | 0.3x                   | 0.3x                       | 6.4x                  | 6.6x                      |
| Robert Half International Inc.  | RHI    | 19.5%                    | 40.1%                  | 33.8%                   | 10.1%             | 12.4%            | 11.3%            | 1.3x                   | 1.2x                       | 11.3x                 | 10.5x                     |
| ASGN Incorporated   | ASGN   | 7.7%                     | 14.5%                  | 9.0%                    | 29.5%             | 29.3%            | 10.9%            | 1.3x                   | 1.1x                       | 11.8x                 | 9.7x                      |
| Korn Ferry  | KFY    | 7.2%                     | 8.1%                   | 11.0%                   | 12.5%             | 31.2%            | 14.9%            | 1.2x                   | 1.1x                       | 7.9x                  | 7.0x                      |
| TrueBlue, Inc.  | TBI    | 4.5%                     | 11.5%                  | 7.5%                    | -0.4%             | -1.6%            | 4.9%             | 0.4x                   | 0.4x                       | 7.8x                  | 7.8x                      |
|   | Mean   | 8.9%                     | 18.5%                  | 14.7%                   | 10.1%             | 12.8%            | 9.2%             | 0.9x                   | 0.8x                       | 9.0x                  | 8.4x                      |
|   | Median | 7.2%                     | 14.5%                  | 11.0%                   | 10.1%             | 12.4%            | 10.9%            | 1.2x                   | 1.1x                       | 7.9x                  | 7.8x                      |

## Select Business Services Public Company Valuation Metrics As of March 31, 2019

(USD in millions, except per share data)

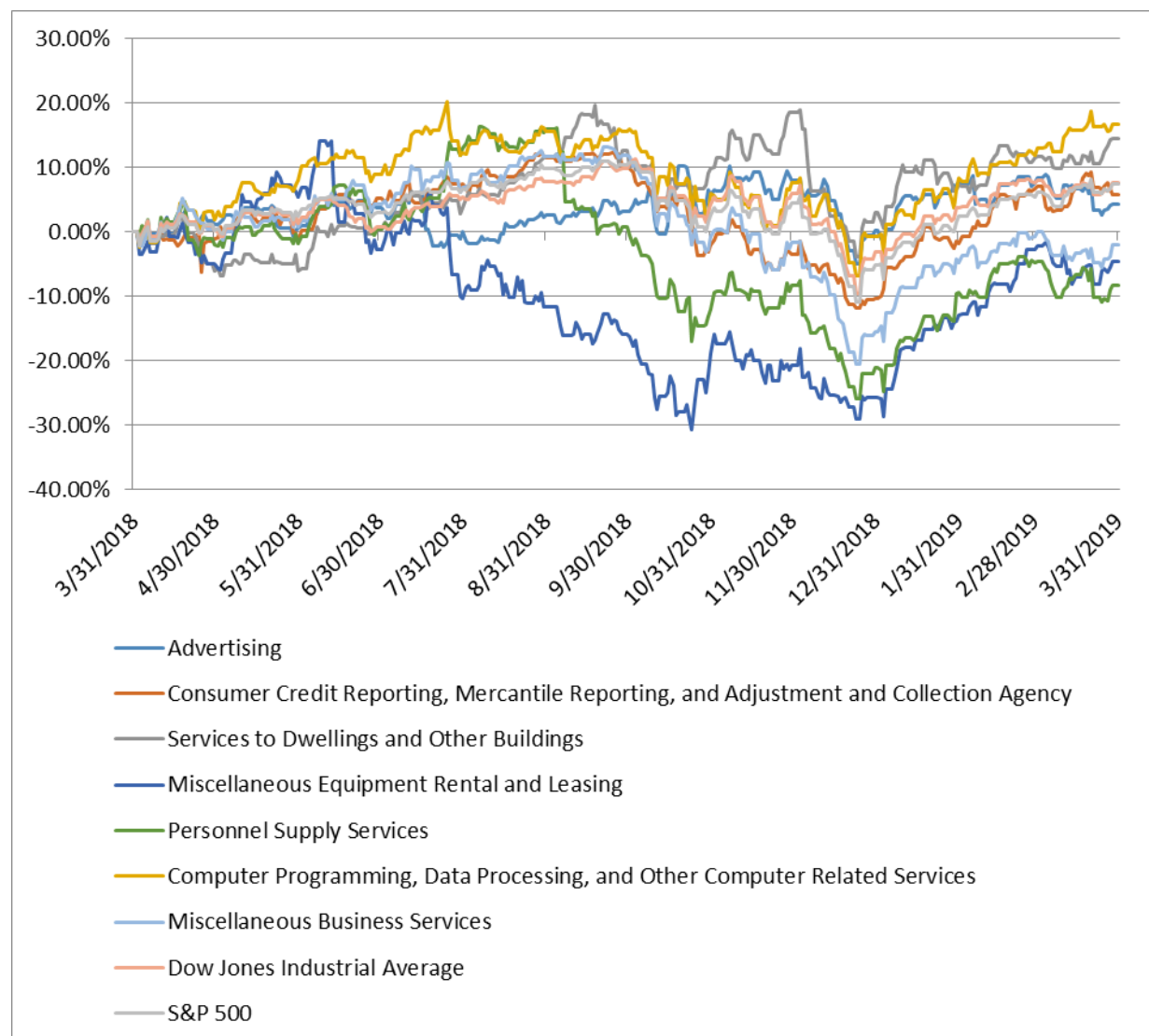
|  |        | LTM Operating Statistics |                        |                         |                   |                  |                  | Trading Multiples      |                            |                       |                           |
|--|--------|--------------------------|------------------------|-------------------------|-------------------|------------------|------------------|------------------------|----------------------------|-----------------------|---------------------------|
|  |        | Return<br>On<br>Assets   | Return<br>On<br>Equity | Return<br>On<br>Capital | Revenue<br>Growth | EBITDA<br>Growth | EBITDA<br>Margin | TEV/<br>LTM<br>Revenue | TEV/<br>CY 2018<br>Revenue | TEV/<br>LTM<br>EBITDA | TEV/<br>CY 2018<br>EBITDA |
| Company Name   | Ticker |                          |                        |                         |                   |                  |                  |                        |                            |                       |                           |
| Computer Programming, Data Processing, and Other Computer Related Services |        |                          |                        |                         |                   |                  |                  |                        |                            |                       |                           |
| Alphabet Inc.  | GOOG   | 9.1%                     | 18.6%                  | 11.6%                   | 23.4%             | 13.0%            | 29.5%            | 5.2x                   | 4.4x                       | 17.6x                 | 12.1x                     |
| Microsoft Corporation  | MSFT   | 9.4%                     | 39.3%                  | 13.6%                   | 15.8%             | 17.4%            | 41.9%            | 7.3x                   | 6.6x                       | 17.4x                 | 15.5x                     |
| International Business<br>Machines Corporation                             | IBM    | 6.1%                     | 49.5%                  | 11.5%                   | -1.7%             | 4.2%             | 22.0%            | 2.0x                   | 2.1x                       | 9.2x                  | 8.4x                      |
| Facebook, Inc.   | FB     | 17.1%                    | 27.9%                  | 19.6%                   | 37.4%             | 25.8%            | 52.3%            | 7.8x                   | 6.3x                       | 14.9x                 | 11.9x                     |
| Oracle Corporation   | ORCL   | 7.2%                     | 29.9%                  | 9.4%                    | 1.4%              | 5.0%             | 41.0%            | 5.0x                   | 5.0x                       | 12.3x                 | 10.8x                     |
| eBay Inc.  | EBAY   | 5.9%                     | 35.3%                  | 8.6%                    | 8.3%              | 2.2%             | 28.0%            | 3.6x                   | 3.5x                       | 12.8x                 | 10.2x                     |
| Booking Holdings Inc.  | BKNG   | 13.9%                    | 39.9%                  | 17.5%                   | 14.6%             | 17.2%            | 39.8%            | 5.6x                   | 5.2x                       | 14.0x                 | 13.5x                     |
| VMware, Inc.   | VMW    | 7.2%                     | 52.8%                  | 14.6%                   | 14.1%             | 13.4%            | 27.1%            | 8.4x                   | 7.5x                       | 31.1x                 | 19.2x                     |
| Automatic Data<br>Processing, Inc.   | ADP    | 4.3%                     | 36.8%                  | 25.5%                   | 8.2%              | 16.9%            | 23.4%            | 5.1x                   | 4.8x                       | 21.7x                 | 19.6x                     |
| Adobe Inc.   | ADBE   | 10.3%                    | 29.0%                  | 14.4%                   | 24.1%             | 19.2%            | 34.0%            | 13.7x                  | 11.7x                      | 40.3x                 | 26.0x                     |
| Cognizant Technology<br>Solutions Corporation                              | CTSH   | 11.4%                    | 19.0%                  | 15.0%                   | 8.9%              | 9.5%             | 20.6%            | 2.4x                   | 2.2x                       | 11.4x                 | 10.1x                     |
| Intuit Inc.  | INTU   | 19.1%                    | 63.4%                  | 35.7%                   | 10.7%             | -2.9%            | 28.5%            | 10.7x                  | 9.6x                       | 37.6x                 | 26.9x                     |
| Cerner Corporation   | CERN   | 7.3%                     | 13.0%                  | 9.1%                    | 4.4%              | -11.8%           | 22.5%            | 3.4x                   | 3.2x                       | 15.1x                 | 10.7x                     |
| Fidelity National<br>Information Services,<br>Fiserv, Inc.                 | FIS    | 4.0%                     | 8.4%                   | 5.0%                    | -2.8%             | 5.4%             | 28.3%            | 5.3x                   | 5.3x                       | 18.8x                 | 13.7x                     |
|  | FISV   | 8.9%                     | 47.3%                  | 12.0%                   | 2.2%              | 5.5%             | 32.6%            | 6.9x                   | 6.5x                       | 21.1x                 | 17.0x                     |
| Carrefour SA   | CA     | 2.5%                     | -0.4%                  | 4.7%                    | -3.1%             | -8.0%            | 4.4%             | 0.3x                   | 0.4x                       | 7.0x                  | 7.6x                      |
| TripAdvisor, Inc.  | TRIP   | 5.3%                     | 8.0%                   | 7.3%                    | 3.8%              | 37.0%            | 14.7%            | 4.0x                   | 3.8x                       | 27.5x                 | 13.8x                     |
| Symantec Corporation   | SYMC   | 2.4%                     | -1.3%                  | 3.6%                    | 0.3%              | 53.6%            | 20.9%            | 3.6x                   | 3.5x                       | 17.3x                 | 7.7x                      |
| Activision Blizzard, Inc.  | ATVI   | 6.8%                     | 17.4%                  | 9.0%                    | 6.9%              | 12.6%            | 33.4%            | 4.4x                   | 5.2x                       | 13.2x                 | 13.8x                     |
| Xerox Corporation  | XXR    | 4.0%                     | 7.0%                   | 5.7%                    | -4.2%             | -0.2%            | 14.1%            | 1.2x                   | 1.3x                       | 8.4x                  | 6.9x                      |
|  | Mean   | 8.1%                     | 27.0%                  | 12.7%                   | 8.6%              | 11.7%            | 27.9%            | 5.3x                   | 4.9x                       | 18.4x                 | 13.8x                     |
|  | Median | 7.2%                     | 28.4%                  | 11.6%                   | 7.5%              | 11.0%            | 28.1%            | 5.0x                   | 4.9x                       | 16.2x                 | 12.8x                     |
| Miscellaneous Business Services  |        |                          |                        |                         |                   |                  |                  |                        |                            |                       |                           |
| Alliance Data Systems<br>Corporation                                       | ADS    | 3.1%                     | 46.0%                  | 3.4%                    | 0.9%              | 7.3%             | 23.9%            | 3.9x                   | 3.8x                       | 16.4x                 | 15.1x                     |
| ADT Inc.   | ADT    | 1.3%                     | -15.9%                 | 1.5%                    | 6.2%              | 3.0%             | 49.7%            | 3.2x                   | 2.9x                       | 6.4x                  | 5.9x                      |
| Total System Services,<br>Inc.   | TSS    | 7.6%                     | 23.4%                  | 8.7%                    | -18.3%            | 12.8%            | 27.9%            | 5.0x                   | 5.0x                       | 18.1x                 | 14.0x                     |
| Sotheby's  | BID    | 4.3%                     | 20.5%                  | 7.9%                    | -2.0%             | 15.0%            | 21.6%            | 2.4x                   | 2.5x                       | 11.2x                 | 10.1x                     |
| Shutterfly, Inc.   | SFLY   | 4.9%                     | 8.2%                   | 6.0%                    | 64.8%             | 64.1%            | 13.9%            | 1.0x                   | 0.9x                       | 7.5x                  | 6.3x                      |
| Cardtronics plc  | CATM   | 3.4%                     | 1.0%                   | 4.9%                    | -10.8%            | -16.8%           | 20.6%            | 1.8x                   | 1.8x                       | 8.7x                  | 8.4x                      |
| TTEC Holdings, Inc.  | TTEC   | 5.8%                     | 11.1%                  | 9.3%                    | 2.2%              | -8.7%            | 11.2%            | 1.2x                   | 1.2x                       | 11.2x                 | 9.2x                      |
|  | Mean   | 4.3%                     | 13.5%                  | 6.0%                    | 6.1%              | 10.9%            | 24.1%            | 2.7x                   | 2.6x                       | 11.3x                 | 9.9x                      |
|  | Median | 4.3%                     | 11.1%                  | 6.0%                    | 0.9%              | 7.3%             | 21.6%            | 2.4x                   | 2.5x                       | 11.2x                 | 9.2x                      |

Notes: LTM (latest twelve months); NTM (next twelve months); EBITDA (earnings before interest, taxes, depreciation and amortization); TEV (total enterprise value)

Source: Capital IQ



## Business Services Public Company LTM Equity Performance As of March 31, 2019



Note: The indices are derived from the equity performance of the previously listed companies. Source: Capital IQ

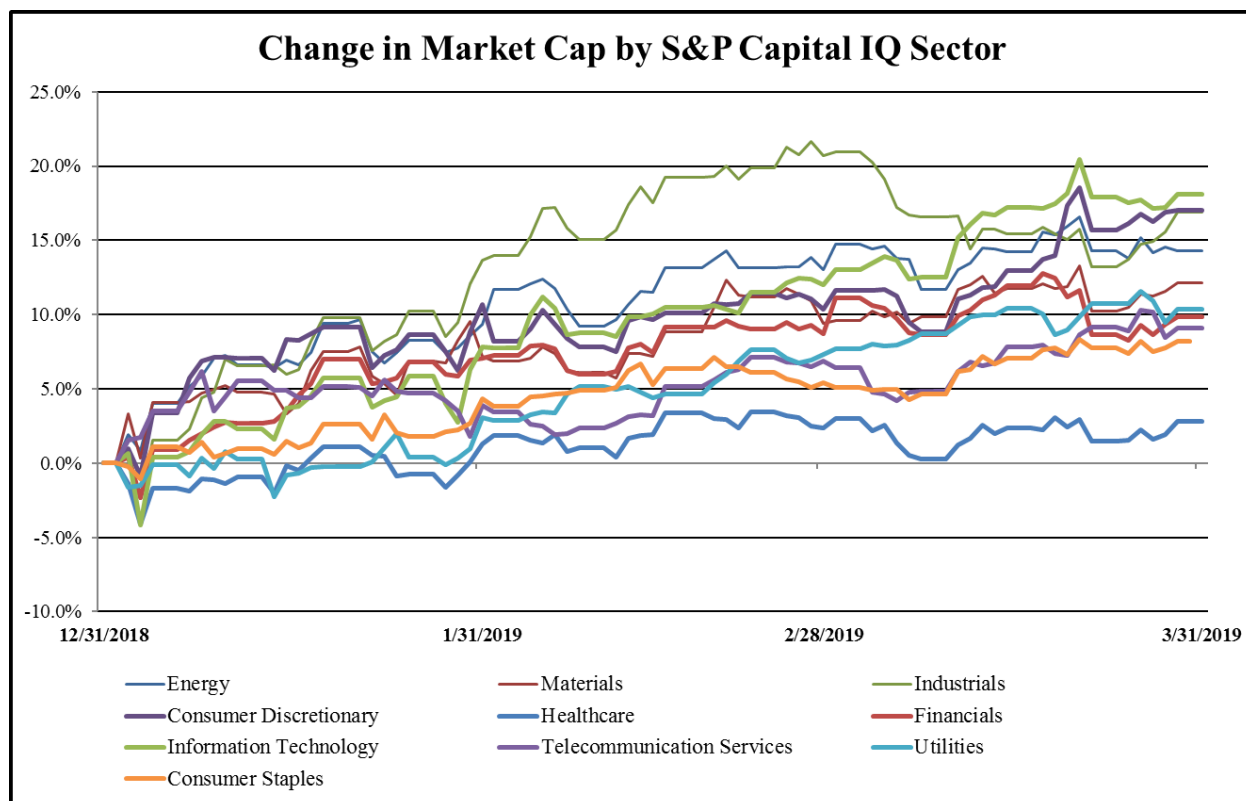
## Recent M&A Activity in the Business Services Industry March 31, 2018 to March 31, 2019

(USD in millions)

| Close Date | Target  | Acquirer  | Target Company Primary Industry | Implied Enterprise Value |
|------------|---|---|---------------------------------|--------------------------|
| 11/5/2018  | CA, Inc.  | Broadcom Inc.   | Systems Software                | \$18,448.02              |
| 5/1/2018   | MuleSoft, Inc.  | salesforce.com, inc.                                      | Application Software            | \$6,607.41               |
| 4/16/2018  | DST Systems, Inc.   | SS&C Technologies Holdings, Inc.                          | Data Processing and             | \$5,671.07               |
| 10/31/2018 | Marketo, Inc.   | Adobe Systems Incorporated (nka:Adobe Inc.)               | Application Software            | \$4,750.00               |
| 10/9/2018  | Atos Syntel   | Atos SE   | Data Processing and             | \$3,541.56               |
| 10/1/2018  | Charles River Systems, Inc.                               | State Street Bank and Trust Company (Boston, MA)          | Application Software            | \$2,600.00               |
| 10/5/2018  | Convergys Corporation                                     | Concentrix Corporation                                    | Data Processing and             | \$2,544.74               |
| 4/5/2018   | Callidus Software Inc.                                    | SAP America, Inc.   | Application Software            | \$2,425.92               |
| 10/1/2018  | Duo Security, Inc.  | Cisco Systems, Inc.                                       | Systems Software                | \$2,350.00               |
| 6/15/2018  | Blackhawk Network Holdings, Inc.                          | Silver Lake; P2 Capital Partners, LLC; P2 Capital Master  | Data Processing and             | \$2,341.92               |
| 1/3/2019   | Hortonworks, Inc.   | Cloudera, Inc.  | Application Software            | \$2,005.42               |
| 9/6/2018   | Athena SuperHoldCo, Inc.                                  | Fortive Corporation                                       | Application Software            | \$2,000.00               |
| 1/10/2019  | Apprio, Inc.  | Vista Equity Partners LLC                                 | Application Software            | \$1,867.17               |
| 8/2/2018   | Ipreo Holdings LLC  | Markit North America, Inc.                                | Application Software            | \$1,855.00               |
| 2/1/2019   | SendGrid, Inc.  | Twilio Inc.   | Application Software            | \$1,833.57               |
| 2/15/2019  | MINDBODY, Inc.  | Vista Equity Partners LLC; Vista Equity Partners Fund VI  | Application Software            | \$1,829.33               |
| 1/10/2019  | Imperva, Inc.   | Thoma Bravo, LLC  | Systems Software                | \$1,814.70               |
| 8/1/2018   | PowerSchool Group LLC                                     | Onex Corporation; Onex Partners IV LP                     | Application Software            | \$1,744.00               |
| 6/18/2018  | Magento, Inc.   | Adobe Systems Incorporated (nka:Adobe Inc.)               | Application Software            | \$1,680.00               |
| 10/4/2018  | TravelClick, Inc.   | Amadeus Americas, Inc.                                    | Application Software            | \$1,520.00               |
| 2/21/2019  | Cylance Inc.  | BlackBerry Limited  | Systems Software                | \$1,500.00               |
| 11/16/2018 | IntraLinks Holdings, Inc.                                 | SS&C Technologies Holdings, Inc.                          | Application Software            | \$1,500.00               |
| 10/1/2018  | Eze Software Group LLC                                    | SS&C Technologies Holdings, Inc.                          | Application Software            | \$1,450.00               |
| 7/2/2018   | Viewpoint, Inc.   | Trimble Inc.  | Application Software            | \$1,200.00               |
| 6/4/2018   | PowerPlan, Inc.   | Roper Technologies, Inc.                                  | Application Software            | \$1,110.00               |
| 12/31/2018 | Data Center Colocation Operations and Assets of AT&T      | Brookfield Infrastructure Partners L.P.                   | Data Processing and             | \$1,100.00               |
| 5/21/2018  | CommerceHub, Inc.   | GTCR, LLC; Sycamore Partners; Sycamore Partners II;       | Application Software            | \$1,055.87               |
| 12/31/2018 | Veracode, Inc.  | Thoma Bravo, LLC  | Application Software            | \$950.00                 |
| 12/19/2018 | PlanGrid, Inc.  | Autodesk, Inc.  | Application Software            | \$875.00                 |
| 7/27/2018  | The Gordian Group, Inc.                                   | Fortive Corporation                                       | Application Software            | \$778.00                 |
| 3/31/2018  | Fiserv Solutions, LLC                                     | Warburg Pincus LLC  | Application Software            | \$761.82                 |
| 8/20/2018  | Datorama Inc.   | salesforce.com, inc.                                      | Application Software            | \$757.85                 |
| 10/1/2018  | Mendix Inc.   | Siemens Aktiengesellschaft                                | Application Software            | \$700.12                 |
| 10/31/2018 | ATM and Debit Servicing business of Elan Financial        | Fiserv, Inc.  | Data Processing and             | \$690.00                 |
| 3/26/2019  | Webroot Inc.  | Carbonite, Inc.   | Systems Software                | \$618.50                 |
| 3/13/2019  | YOU Technology, LLC                                       | Inmar, Inc.   | Application Software            | \$565.00                 |
| 3/28/2019  | Demisto, Inc.   | Palo Alto Networks, Inc.                                  | Systems Software                | \$560.00                 |
| 12/11/2018 | Heptio Inc.   | VMware, Inc.  | Application Software            | \$550.00                 |
| 8/15/2018  | Franklin Madison Group LLC                                | Mill Point Capital LLC; Mill Point Capital Partners, L.P. | Advertising                     | \$550.00                 |
| 10/5/2018  | InfoArmor, Inc.   | The Allstate Corporation                                  | Systems Software                | \$525.00                 |
| 10/4/2018  | CloudHealth Technologies, Inc.                            | VMware, Inc.  | Application Software            | \$500.00                 |
| 1/8/2019   | IQMS Inc.   | Dassault Systèmes SE                                      | Application Software            | \$425.00                 |
| 12/21/2018 | GTCR/FMG Blocker Corp/NCP Fairway, Inc.                   | Lamar Media Corp.   | Advertising                     | \$418.50                 |
| 6/27/2018  | Wipro Data Centre and Cloud Services, Inc. and Portion of | Ensono, LP  | Data Processing and             | \$405.00                 |
| 2/1/2019   | Nuance Document Imaging, Inc.                             | Kofax, Inc.   | Application Software            | \$400.00                 |
| 9/13/2018  | SCVNGR, Inc.  | Grubhub Holdings Inc.                                     | Application Software            | \$390.00                 |
| 4/6/2018   | Phantom Cyber Corporation                                 | Splunk Inc.   | Systems Software                | \$363.77                 |
| 4/16/2018  | Public Relations Solutions and Digital Media Services     | West Corporation  | Advertising                     | \$335.00                 |
| 7/17/2018  | Actian Corporation  | HCL Technologies Limited; Sumeru Equity Partners, Inc.    | Application Software            | \$330.00                 |
| 1/24/2019  | Noventis Inc.   | WEX Inc.  | Data Processing and             | \$310.00                 |
| 12/17/2018 | Liaison Technologies, Inc.                                | Open Text Corporation                                     | Application Software            | \$310.00                 |
| 10/25/2018 | Relayr, Inc.  | HSB Group, Inc.   | Application Software            | \$297.91                 |
| 10/1/2018  | iFountain, LLC  | Atlassian Corporation Plc                                 | Application Software            | \$295.00                 |
| 2/20/2019  | AppRiver, LLC   | Zix Corporation   | Application Software            | \$275.00                 |
| 4/2/2018   | OneContent Business                                       | Hyland Software, Inc.                                     | Application Software            | \$260.00                 |
| 1/3/2019   | SiriusDecisions, Inc.                                     | Forrester Research, Inc.                                  | Advertising                     | \$245.00                 |
| 10/24/2018 | Trafficware Group Inc.                                    | Cubic Transportation Systems, Inc.                        | Application Software            | \$235.70                 |
| 1/23/2019  | Trendkite, Inc.   | Cision Ltd.   | Application Software            | \$221.10                 |

Source: Capital IQ

## S&P Capital IQ - Sector Last 3 Month Equity Performance As of March 31, 2019

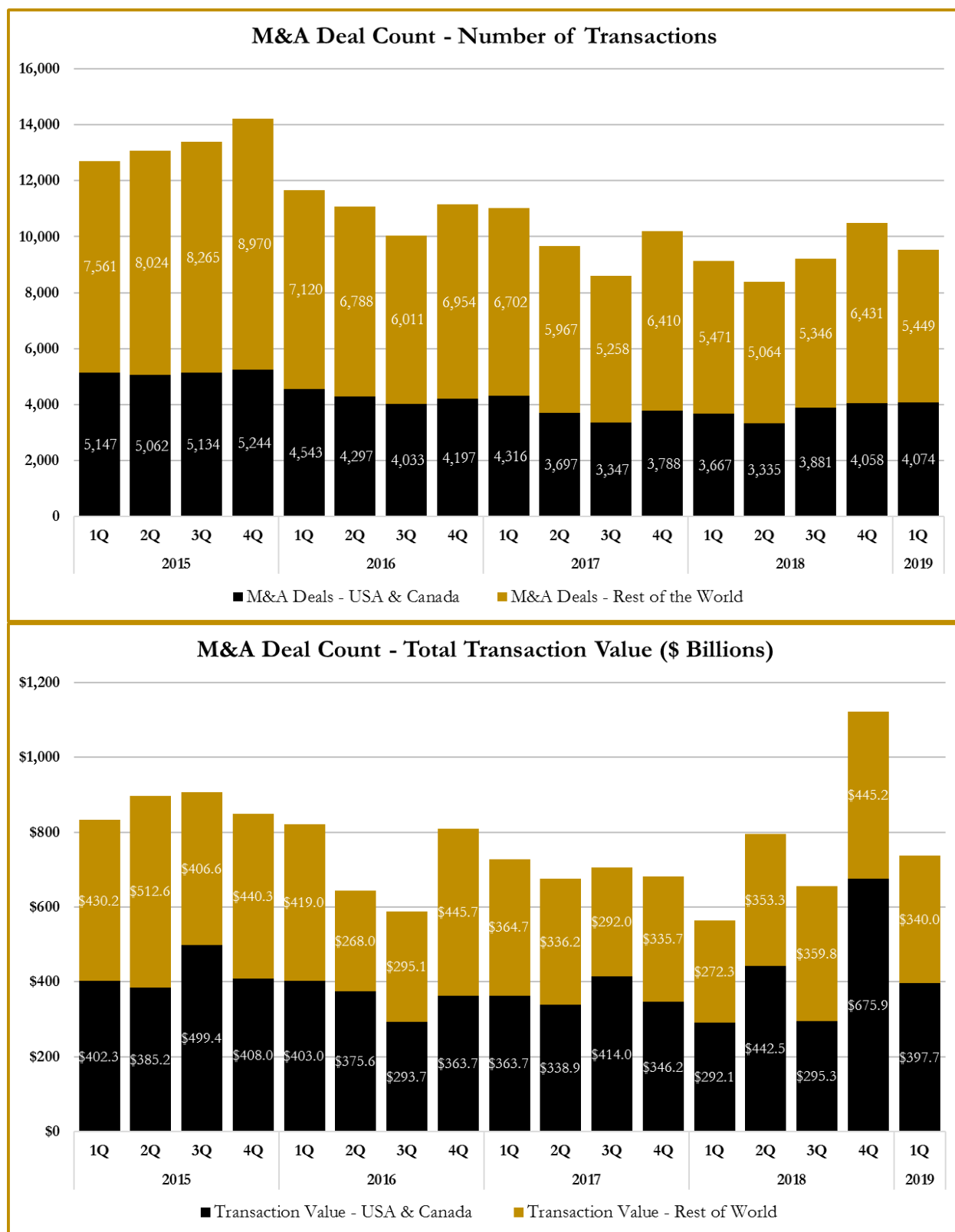


Note: The indices are derived from the equity performance of the S&P Capital IQ Sectors. Source: Capital IQ

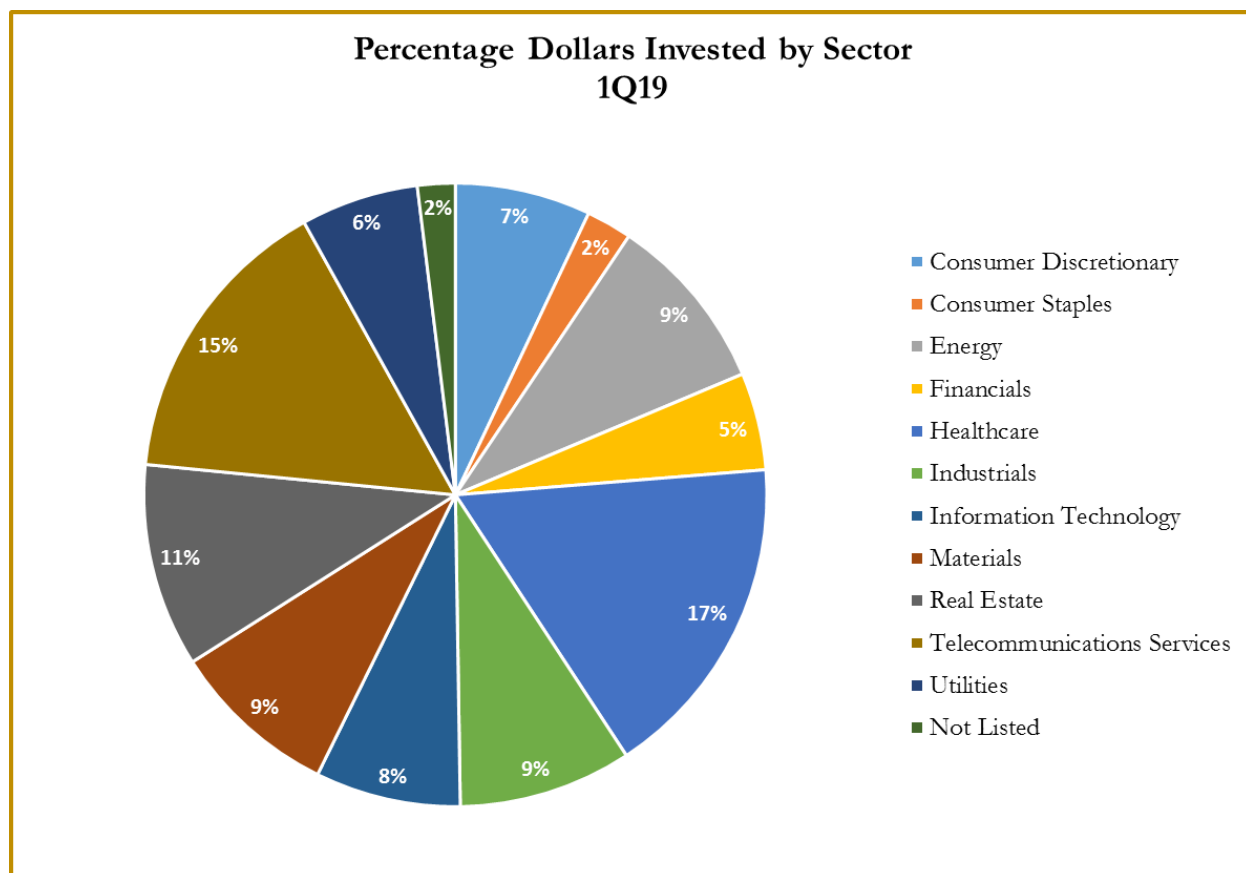


## M&A Deal Flow Statistics by S&P Capital IQ Sector

### As of March 31, 2019



## M&A Deal Flow Statistics by S&P Capital IQ Sector As of March 31, 2019





## About Us

Houlihan Capital is a leading, solutions-driven valuation, financial advisory and boutique investment banking firm. We pride ourselves on being thought leaders in an ever-changing landscape.

Houlihan Capital is SOC-compliant, a FINRA and SIPC member and committed to the highest levels of professional ethics and standards.

## Valuation & Financial Advisory

We provide an array of services that include enterprise valuations, portfolio valuation, valuation of carried interest, transaction opinions, tax and financial reporting compliance, purchase price allocations, and a wide variety of consulting services through our Financial Advisory Group.

## Investment Banking

Through our Investment Banking Group, we offer sell side/buy side advisory and capital raises. Through our Special Situations desk, we provide services that fit outside the archetypal verticals, including liquidity solutions, transactional advisory, and secondary market advisory and trading.

## Litigation Support

Our team provides support for a wide variety of situations including commercial and shareholder disputes, derivatives and structured finance litigation, and fraudulent conveyance.

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industry expertise and services, visit:**

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