Deloitte Corporate Finance LLC (DCF) US Business Services leadership

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Deloitte\(^1\) global Business Services network

Asia

Yu Dong Yuan  
Shanghai, China

Ivan Wong  
Hong Kong, China

Shingo Kayama  
Tokyo, Japan

Sung Hoon Oh  
Seoul, Korea

Latin America

Marcos Bazan  
Buenos Aires, Argentina

Reinaldo Grasson  
Sao Paulo, Brazil

Jorge Brito  
Quito, Ecuador

North America

David Lam  
Vancouver, Canada

Europe

Byron Griffin  
London, United Kingdom

Katie Folwell-Davies  
London, United Kingdom

Richard Parsons  
London, United Kingdom

Sascha Mauries  
Dusseldorf, Germany

Albert Hannak  
Wien, Austria

Claire Deguerry  
Paris, France

Olivier Magnin  
Paris, France

Charles Bédier  
Paris, France

Jose Chimeno  
Lisbon, Portugal

Fernando Baldellou  
Madrid, Spain

Antonio Solinas  
Milan, Italy

DCF deals closed by industry\(^2\)

- Consumer: 16.7%
- Industrial: 5.6%
- LSHC: 5.6%
- TMT: 4.8%
- Business Services: 35.2%
- Energy & Resources: 14.8%
- Financial Services: 14.8%

DCF deals closed by transaction type\(^2\)

- Capital Raise: 74.8%
- Sellside: 10.0%
- Buyside: 6.2%
- Advisory: 7.0%

Leading M&A platform\(^3\)

<table>
<thead>
<tr>
<th>Mid-Market financial advisor</th>
<th>Rank</th>
<th>No. of deals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deloitte</td>
<td>1</td>
<td>468</td>
</tr>
<tr>
<td>PwC</td>
<td>2</td>
<td>447</td>
</tr>
<tr>
<td>KPMG</td>
<td>3</td>
<td>403</td>
</tr>
<tr>
<td>Goldman Sachs &amp; Co</td>
<td>4</td>
<td>382</td>
</tr>
<tr>
<td>EY</td>
<td>5</td>
<td>358</td>
</tr>
<tr>
<td>Rothschild &amp; Co</td>
<td>6</td>
<td>325</td>
</tr>
<tr>
<td>JPMorgan</td>
<td>7</td>
<td>323</td>
</tr>
<tr>
<td>Morgan Stanley</td>
<td>8</td>
<td>277</td>
</tr>
<tr>
<td>Citi</td>
<td>9</td>
<td>246</td>
</tr>
<tr>
<td>Houlihan Lokey</td>
<td>10</td>
<td>229</td>
</tr>
</tbody>
</table>

1. Deloitte refers to Deloitte Touche Tohmatsu Limited, its network of member firms, and their related entities.
2. Represents transactions during FY 2018. For certain deals, DCF acted as a subcontractor to a Deloitte member firm.
Business Services M&A sector coverage

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In this update:
• Business Services trends
• Economic outlook
• Industry analysis
• Select M&A transactions

Who we are:
Deloitte Corporate Finance LLC is a leading global middle market M&A adviser. The firm’s professionals have extensive knowledge in the Business Services space and use their experience to help clients maximize value.

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Demonstrated transaction experience

- Founded in 1996 and headquartered in Houston, Texas, U.S. Legal Support, Inc. (U.S. Legal or the Company) is one of the largest providers of litigation services in the United States.
- DCF ran a highly-competitive marketing process, yielding numerous indications of interest and letters of intent at attractive valuations from potential acquirors. DCF assisted U.S. Legal’s shareholders with selecting the financial partner that would be able to add significant value both financially and operationally, while preserving core values of the business.
- Orion ICS LLC (Orion or the Company) is a recruitment process outsourcing (RPO), military recruitment, and skilled professional talent services company providing solutions to U.S. businesses, including many Fortune 100 companies.
- DCF advised Orion through its negotiations with L2 Capital and Lakewood Capital to form a mutually beneficial partnership that the Company can leverage for its next phase of growth.
Macroeconomic outlook

**US gross domestic product**

- GDP ($ in trillions)
- YoY % growth (Adj. for inflation)

**US Treasury yield curve**

- Real yield (%)
- Nominal yield (%)

**US unemployment rate**

- Initial jobless claims
- Unemployment rate (%)

**ISM non-manufacturing index and consumer confidence index**

- ISM Non-manufacturing
- Consumer confidence

Business Services sector outlook

**US corporate profits**

- $ billion
- % Change

**Global segmentation of business process outsourcing**

- North America
- EMEA
- Latin America
- Asia/Pacific

### Business Services sector breakdown and trading statistics

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of companies</th>
<th>% of 52 week high</th>
<th>Median revenue ($ in millions)</th>
<th>Median LTM EBITDA</th>
<th>Median EBITDA margin</th>
<th>Median enterprise value ($)</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
<th>EV/EBITDA margin</th>
<th>EV/EBITDA margin</th>
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</thead>
<tbody>
<tr>
<td>Advertising and Marketing</td>
<td>7</td>
<td>84.4%</td>
<td>5.0%</td>
<td>$1,593.5</td>
<td>14.9%</td>
<td>$13,767.0</td>
<td>1.1x</td>
<td>8.6x</td>
<td>7.9x</td>
<td>11.1</td>
</tr>
<tr>
<td>Business Process Outsourcing</td>
<td>11</td>
<td>83.2%</td>
<td>7.9%</td>
<td>407.7</td>
<td>17.2%</td>
<td>6,422.8</td>
<td>2.2x</td>
<td>13.6x</td>
<td>11.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Consulting</td>
<td>10</td>
<td>84.8%</td>
<td>6.5%</td>
<td>108.4</td>
<td>11.7%</td>
<td>1,410.4</td>
<td>1.3x</td>
<td>12.6x</td>
<td>11.3</td>
<td>11.3</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>11</td>
<td>70.4%</td>
<td>1.6%</td>
<td>67.8</td>
<td>17.3%</td>
<td>689.9</td>
<td>1.6x</td>
<td>11.1x</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>Staffing and Human Resources</td>
<td>14</td>
<td>71.7%</td>
<td>8.8%</td>
<td>189.0</td>
<td>4.6%</td>
<td>2,219.7</td>
<td>0.4x</td>
<td>8.1x</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>Transaction Processing</td>
<td>14</td>
<td>84.9%</td>
<td>10.6%</td>
<td>951.8</td>
<td>27.9%</td>
<td>11,546.1</td>
<td>5.8x</td>
<td>17.0x</td>
<td>13.5</td>
<td></td>
</tr>
</tbody>
</table>

**Comparable Public Companies**

<table>
<thead>
<tr>
<th>Number of companies</th>
<th>% of 52 week high</th>
<th>Median revenue ($ in millions)</th>
<th>Median LTM EBITDA</th>
<th>Median EBITDA margin</th>
<th>Median enterprise value ($)</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
<th>EV/EBITDA margin</th>
<th>EV/EBITDA margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>67</td>
<td>82.9%</td>
<td>7.9%</td>
<td>$345.2</td>
<td>12.9%</td>
<td>$3,872.3</td>
<td>1.4x</td>
<td>11.8x</td>
<td>10.7x</td>
<td>10.7x</td>
</tr>
</tbody>
</table>

### Public comparables three-year stock market performance

![Graph showing stock market performance of NASDAQ Composite Index, S&P 500 Index, and Business Services index]

**Index Performance**

- NASDAQ composite index: 58.2%
- S&P 500 index: 40.1%
- Business Services index: 69.2%


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**Note:** The percentages in the graph are rounded to one decimal place.
Deloitte.
Advertising and Marketing
Sector update | Q4 2018
Advertising and Marketing

Advertising and Marketing trend

Out of home advertising flourishes as other traditional mediums struggle in the digital age¹

As marketing agencies continue to shift their focus away from television, radio, magazine, and newspaper ads in favor of social media and other digital channels, billboards and other out of home advertising strategies have experienced a resurgence. Billboards comprise 66 percent of the out of home advertising market, with about 370 thousand active billboards in the US and an estimated 15 thousand annual additions. As venture backed startups and large corporations continue to see increasing value in out of home marketing strategies, advertising agencies will likely seek innovative methods to leverage modern technology in the billboard space.

Transaction in focus²

December 28, 2018 – S4 Capital plc has closed its previously announced acquisition of San Francisco based MightyHive, a programmatic solutions provider. The deal was valued at $150 million. The transaction with S4 Capital is expected to enable MightyHive to meet rapidly growing demand from clients and expand the opportunities the consultancy can help its clients unlock. The merger with MightyHive furthers S4 Capital’s strategy of aligning award winning digital creative content, digital media planning and buying, and first party data capabilities and follows S4 Capital’s acquisition of international digital creative content and production company MediaMonks earlier this year.

Select Advertising and Marketing M&A transactions³

<table>
<thead>
<tr>
<th>Close date</th>
<th>Target/Acquiror</th>
<th>Target business description</th>
<th>Enterprise value (&quot;EV&quot;)</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending</td>
<td>Gannett Co., Inc. MediaNews Group, Inc.</td>
<td>Operates as a media and marketing solutions company.</td>
<td>$1,632.0</td>
<td>0.5 x</td>
<td>5.4 x</td>
</tr>
<tr>
<td>Pending</td>
<td>Multiplus S.A. TAM Linhas Aereas S.A.</td>
<td>Operates a network of loyalty programs in Brazil.</td>
<td>733.1</td>
<td>1.4</td>
<td>6.4</td>
</tr>
<tr>
<td>December-18</td>
<td>495 Communications, LLC Good Life Networks Inc.</td>
<td>Provides cross-platforms advertising and content marketing services.</td>
<td>15.0</td>
<td>1.0</td>
<td>7.9</td>
</tr>
<tr>
<td>December-18</td>
<td>MightyHive, Inc. S4 Capital plc</td>
<td>Provides online advertising and marketing services.</td>
<td>150.0</td>
<td>3.7</td>
<td>13.5</td>
</tr>
<tr>
<td>October-18</td>
<td>Navience Healthcare Solutions LLC Huntsworth plc</td>
<td>Operates as a payer advisory and marketing agency that offers market research and analytics services.</td>
<td>70.0</td>
<td>10.9</td>
<td>18.4</td>
</tr>
<tr>
<td>October-18</td>
<td>Web.com Group, Inc. Siris Capital Group, LLC</td>
<td>Provides a range of Internet services to small businesses in North America, South America, and the United Kingdom.</td>
<td>2,034.7</td>
<td>2.7</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Advertising and Marketing public comparables

<table>
<thead>
<tr>
<th>Company (Ticker)</th>
<th>% of 52 Week high</th>
<th>LTM revenue (in Millions)</th>
<th>Revenue CAGR (3 Yr)</th>
<th>LTM EBITDA (in Millions)</th>
<th>EBITDA margin</th>
<th>Enterprise value (in Millions)</th>
<th>LTM EV/Revenue</th>
<th>LTM EV/EBITDA</th>
<th>LTM EV/EBITDA margin</th>
<th>NTM EV/Revenue</th>
<th>NTM EV/EBITDA</th>
<th>NTM EV/EBITDA margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheil Worldwide Inc. (KOSE:A030000)</td>
<td>93.4%</td>
<td>$3,234.4</td>
<td>9.2%</td>
<td>$191.7</td>
<td>5.9%</td>
<td>$1,645.7</td>
<td>0.5x</td>
<td>8.6x</td>
<td>8.0x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hakuhodo DY Holdings Inc (TSE:2433)</td>
<td>78.7%</td>
<td>$12,225.9</td>
<td>6.7%</td>
<td>$665.1</td>
<td>5.4%</td>
<td>$2,989.9</td>
<td>0.4%</td>
<td>8.0%</td>
<td>7.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Omnicom Group Inc. (NYSE:OMC)</td>
<td>89.2%</td>
<td>$15,380.0</td>
<td>0.4%</td>
<td>$2,352.0</td>
<td>15.3%</td>
<td>$20,301.0</td>
<td>1.3%</td>
<td>8.6%</td>
<td>7.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicis Groupe S.A. (ENXTPA:PUB)</td>
<td>82.9%</td>
<td>$10,843.5</td>
<td>3.3%</td>
<td>$1,996.3</td>
<td>18.4%</td>
<td>$17,271.6</td>
<td>1.6%</td>
<td>8.7%</td>
<td>8.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Interpublic Group of Companies, Inc. (NYSE:IPG)</td>
<td>85.9%</td>
<td>$8,157.9</td>
<td>2.3%</td>
<td>$1,190.7</td>
<td>14.6%</td>
<td>$10,262.3</td>
<td>1.3%</td>
<td>8.6%</td>
<td>6.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WPP plc (LSE:WPP)</td>
<td>58.6%</td>
<td>$19,934.7</td>
<td>8.3%</td>
<td>$3,035.7</td>
<td>15.2%</td>
<td>$20,616.2</td>
<td>1.0%</td>
<td>6.8%</td>
<td>7.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Median:
- % of 52 Week high: 86.4%
- LTM revenue (in Millions): $11,534.7
- Revenue CAGR (3 Yr): 5.0%
- LTM EBITDA (in Millions): $1,593.5
- EBITDA margin: 14.9%
- Enterprise value (in Millions): $13,767.0
- LTM EV/Revenue: 1.1x
- LTM EV/EBITDA: 8.6x
- NTM EV/EBITDA: 7.8x

Mean:
- % of 52 Week high: 81.4%
- LTM revenue (in Millions): $11,534.7
- Revenue CAGR (3 Yr): 5.0%
- LTM EBITDA (in Millions): $1,593.5
- EBITDA margin: 12.5%
- Enterprise value (in Millions): $13,767.0
- LTM EV/Revenue: 1.0x
- LTM EV/EBITDA: 8.2x
- NTM EV/EBITDA: 7.7x

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Deloitte

Business Process Outsourcing

Sector update | Q4 2018
Business Process Outsourcing

**Business Process Outsourcing trend**

**Business process outsourcing growth in the Philippines**

As small- and medium-sized companies continue to transition to the cloud, demand for business process outsourcing services has grown significantly. Lloyd Ernst, CEO of the business process outsourcing company Cloudstaff, contends that enterprises are increasingly recognizing the opportunity to leverage untapped talent in the Philippines. Although a considerable amount of outsourced hiring has been focused on other regions, including Singapore and Hong Kong, it is estimated that 1.3 million people are currently employed by business process outsourcing companies in the Philippines. Ernst and other technology executives assert that the high level of English language proficiency and exposure to Western culture within Filipino communities streamlines training processes for the Pinoy population.

**Segment in focus – legal services**

**2018** – 2018 was a year marked by significant M&A activity in the legal services sector. Select transaction highlights from this past year include the acquisition of U.S. Legal Support, CIVC Partners’ acquisition of Magna Legal Services, and the roll-up of Advanced Discovery, Consilio, and DiscoverReady. Leading companies of scale in this industry, defined by recurring revenue, limited cyclicality, and a fragmented base of smaller competitors, garnered significant interest from private equity firms.

<table>
<thead>
<tr>
<th>Close date</th>
<th>Target/ Acquiror</th>
<th>Target business description</th>
<th>Enterprise value (*&quot;EV&quot;) (in Millions)</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending</td>
<td>Cortex Business Solutions Inc.</td>
<td>Supplies e-commerce products and services in Canada and the United States.</td>
<td>$30.3</td>
<td>3.3 x</td>
<td>21.4 x</td>
</tr>
<tr>
<td>December-18</td>
<td>Communisis plc</td>
<td>Provides integrated business services in the United Kingdom and internationally.</td>
<td>225.0</td>
<td>0.4</td>
<td>6.8</td>
</tr>
<tr>
<td>October-18</td>
<td>Convergys Corporation</td>
<td>Provides customer management services to communications and media, technology, financial services, retail, healthcare, government, travel and hospitality, and other vertical markets worldwide.</td>
<td>2,544.7</td>
<td>0.9</td>
<td>7.4</td>
</tr>
<tr>
<td>October-18</td>
<td>Impetus Automotive Limited</td>
<td>Provides automotive consultancy services to vehicle manufacturers in the United Kingdom, mainland Europe, the Asia Pacific, and the Russian Federation.</td>
<td>40.4</td>
<td>1.1</td>
<td>N/A</td>
</tr>
<tr>
<td>October-18</td>
<td>TravelClick, Inc.</td>
<td>Provides cloud-based software solutions for hoteliers worldwide.</td>
<td>1,520.0</td>
<td>4.1</td>
<td>17.7</td>
</tr>
<tr>
<td>April-18</td>
<td>CSRA Inc.</td>
<td>Delivers information technology solutions and professional services to government customers to modernize legacy systems, protecting networks and assets.</td>
<td>9,871.1</td>
<td>1.9</td>
<td>11.7</td>
</tr>
</tbody>
</table>

### Business Process Outsourcing public comparables

<table>
<thead>
<tr>
<th>Company (Ticker)</th>
<th>% of 52 Week high</th>
<th>LTM revenue (in Millions)</th>
<th>Revenue CAGR (3 Yr)</th>
<th>LTM EBITDA (in Millions)</th>
<th>EBITDA margin</th>
<th>Enterprise value (in Millions)</th>
<th>LTM EV/Revenue</th>
<th>LTM EV/EBITDA</th>
<th>NTM EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognizant Technology Solutions Corporation (NasdaqGS:CTSH)</td>
<td>78.2 %</td>
<td>$15,824.0</td>
<td>9.9 %</td>
<td>$3,305.0</td>
<td>20.9 %</td>
<td>$34,495.3</td>
<td>2.2 x</td>
<td>10.4 x</td>
<td>9.4 x</td>
</tr>
<tr>
<td>Computershare Limited (ASX:CPU)</td>
<td>87.5</td>
<td>2,297.6</td>
<td>5.2</td>
<td>575.8</td>
<td>25.1</td>
<td>8,049.7</td>
<td>3.5</td>
<td>14.0</td>
<td>11.6</td>
</tr>
<tr>
<td>Convergys Corporation</td>
<td>91.4</td>
<td>2,701.3</td>
<td>(3.1)</td>
<td>328.7</td>
<td>12.2</td>
<td>2,281.1</td>
<td>0.8</td>
<td>6.9</td>
<td>N/A</td>
</tr>
<tr>
<td>DXC Technology Company (NYSE:DXC)</td>
<td>57.4</td>
<td>24,162.0</td>
<td>48.3</td>
<td>5,453.0</td>
<td>22.6</td>
<td>21,934.2</td>
<td>0.9</td>
<td>4.0</td>
<td>4.6</td>
</tr>
<tr>
<td>EniService Holdings, Inc. (NasdaqGS:EXLS)</td>
<td>83.1</td>
<td>846.1</td>
<td>12.3</td>
<td>117.2</td>
<td>13.9</td>
<td>1,968.3</td>
<td>2.3</td>
<td>16.8</td>
<td>11.6</td>
</tr>
<tr>
<td>Genpact Limited (NYSE:G)</td>
<td>82.9</td>
<td>2,899.9</td>
<td>6.3</td>
<td>407.7</td>
<td>14.1</td>
<td>6,422.8</td>
<td>2.2</td>
<td>15.8</td>
<td>11.4</td>
</tr>
<tr>
<td>Sykes Enterprises, Incorporated (NasdaqGS:SYKE)</td>
<td>85.2</td>
<td>1,629.7</td>
<td>7.9</td>
<td>155.3</td>
<td>9.5</td>
<td>1,081.5</td>
<td>0.7</td>
<td>7.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Tata Consultancy Services Limited (NSEI:TCS)</td>
<td>83.2</td>
<td>20,190.8</td>
<td>10.4</td>
<td>5,474.4</td>
<td>27.1</td>
<td>99,082.2</td>
<td>4.9</td>
<td>18.1</td>
<td>16.7</td>
</tr>
<tr>
<td>TTEC Holdings, Inc. (NasdaqGS:TTEC)</td>
<td>78.3</td>
<td>1,516.7</td>
<td>5.7</td>
<td>174.9</td>
<td>11.5</td>
<td>1,716.3</td>
<td>1.1</td>
<td>9.8</td>
<td>8.0</td>
</tr>
<tr>
<td>Wipro Limited (BSE:507685)</td>
<td>99.5</td>
<td>7,713.3</td>
<td>4.6</td>
<td>1,340.9</td>
<td>17.4</td>
<td>18,286.9</td>
<td>2.4</td>
<td>13.6</td>
<td>10.8</td>
</tr>
<tr>
<td>WNS (Holdings) Limited (NYSE:WNS)</td>
<td>83.2</td>
<td>801.3</td>
<td>13.2</td>
<td>137.6</td>
<td>17.2</td>
<td>2,200.4</td>
<td>2.7</td>
<td>16.0</td>
<td>13.5</td>
</tr>
</tbody>
</table>

#### Median
- % of 52 Week high: 83.2 %
- LTM revenue (in Millions): $2,701.3
- Revenue CAGR (3 Yr): 7.9 %
- LTM EBITDA (in Millions): $407.7
- EBITDA margin: 17.2 %
- Enterprise value (in Millions): $6,422.8
- LTM EV/Revenue: 2.2 x
- LTM EV/EBITDA: 13.6 x
- NTM EV/EBITDA: 11.1 x

#### Mean
- % of 52 Week high: 82.7 %
- LTM revenue (in Millions): $11.0 %
- Revenue CAGR (3 Yr): 17.4 %
- LTM EBITDA (in Millions): 2.2 x
- LTM EV/Revenue: 12.0 x
- LTM EV/EBITDA: 10.4 x

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### Business Process Outsourcing historical EV/EBITDA multiples

![Business Process Outsourcing historical EV/EBITDA multiples](chart.png)

- **Business Process Outsourcing**
- **S&P 500 Index**

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Deloitte.
Consulting
Sector update | Q4 2018
Consulting

Consulting trend

High attrition rates of junior staff within the consulting industry

Many consultancies and other professional services firms are struggling to retain junior talent beyond the first few years of employment. With millennials being less likely to stick with an employer for a long period of time and comprising the majority of consultancy staff ranking below Senior Manager, high turnover rates may persist in the industry. Some professional services firms have implemented solutions aimed at driving higher retention of junior staff, such as Deloitte’s WorkAgility Programme which enables employees to take extended time off for travel. It is anticipated that consultancies will continue to look for innovative channels to connect with and cater to their junior staff.

Transaction in focus

December 3, 2018 - Accenture (NYSE: ACN) has acquired Enaxis Consulting (Enaxis), a Houston based management consulting firm with deep experience in digital capabilities, data science and agile project delivery focused on the upstream oil and gas and oilfield services sectors and the airline industry. Enaxis’ advisory services enable clients to transform their organizations, improve operational efficiency and drive innovation. Enaxis serves Fortune 100 and Fortune 500 companies and regularly consults with chief information officers, chief technology officers, chief digital officers, and other company leaders on the design and agile implementation of emerging digital technologies and business operating models. Clients draw upon Enaxis’ deep experience in organizational change management and its expertise in advanced analytics, robotic process automation, and the internet of things technologies.

Select Consulting M&A transactions

<table>
<thead>
<tr>
<th>Close date</th>
<th>Target/ Acquiror</th>
<th>Target business description</th>
<th>Enterprise value (&quot;EV&quot;)</th>
<th>EV/ Revenue</th>
<th>EV/ EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending</td>
<td>Project Management Partners Pty Ltd OUTSOURCING Inc.</td>
<td>Offers advice and support to organizations to run projects and programmes.</td>
<td>$29.6</td>
<td>0.5 x</td>
<td>N/A x</td>
</tr>
<tr>
<td>January-19</td>
<td>Imperva, Inc. Thoma Bravo, LLC</td>
<td>Engages in the development, market, sale, and support of cyber security solutions that protect business critical data and applications in the cloud or on premises worldwide.</td>
<td>1,814.7</td>
<td>5.2</td>
<td>365.7</td>
</tr>
<tr>
<td>December-18</td>
<td>Enaxis Consulting LP Accenture plc</td>
<td>Provides management consulting services to operators in the oil and gas and airline industries.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>August-18</td>
<td>Thoreau Holdco, LLC and Navigant Consulting Ankura Consulting Group, LLC</td>
<td>Provides professional and advisory services to clients primarily in the financial services sector.</td>
<td>470.0</td>
<td>1.5</td>
<td>11.9</td>
</tr>
<tr>
<td>December-17</td>
<td>CH2M HILL Companies, Ltd. Jacobs Engineering Group Inc.</td>
<td>Provides engineering, construction, consulting, design, procurement, program management, and technical services in the United States.</td>
<td>3,263.1</td>
<td>0.6</td>
<td>N/A</td>
</tr>
<tr>
<td>May-17</td>
<td>The CJS Solutions Group LLC Tech Mahindra (Americas), Inc.</td>
<td>Offers healthcare technology consulting services.</td>
<td>220.0</td>
<td>1.9</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Consulting public comparables

<table>
<thead>
<tr>
<th>Company (Ticker)</th>
<th>% of 52 Week high</th>
<th>LTM Revenue</th>
<th>Revenue CAGR (3 Yr)</th>
<th>LTM EBITDA</th>
<th>EBITDA margin</th>
<th>Enterprise value</th>
<th>LTM EV/Revenue</th>
<th>LTM EV/EBITDA</th>
<th>NTM EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accenture plc (NYSE:ACN)</td>
<td>84.9%</td>
<td>$40,294.7</td>
<td>8.9%</td>
<td>$6,569.6</td>
<td>16.3%</td>
<td>$91,090.8</td>
<td>2.3x</td>
<td>13.9x</td>
<td>12.5x</td>
</tr>
<tr>
<td>Booz Allen Hamilton Holding Corporation (NYSE:BAH)</td>
<td>89.9%</td>
<td>6,366.9</td>
<td>6.2%</td>
<td>631.7</td>
<td>9.9%</td>
<td>8,208.4</td>
<td>1.3x</td>
<td>13.0x</td>
<td>12.5x</td>
</tr>
<tr>
<td>CBIZ, Inc. (NYSE:CBZ)</td>
<td>83.4%</td>
<td>918.1</td>
<td>7.3%</td>
<td>105.5</td>
<td>11.5%</td>
<td>1,280.8</td>
<td>1.4</td>
<td>12.1</td>
<td>10.6</td>
</tr>
<tr>
<td>CRA International, Inc. (NasdaqGS:CRAI)</td>
<td>71.7%</td>
<td>408.9</td>
<td>9.5%</td>
<td>30.6</td>
<td>7.5%</td>
<td>354.6</td>
<td>0.8</td>
<td>10.9</td>
<td>N/A</td>
</tr>
<tr>
<td>Exponent, Inc. (NasdaqGS:EXPO)</td>
<td>97.1%</td>
<td>352.1</td>
<td>6.0%</td>
<td>88.7</td>
<td>25.2%</td>
<td>2,554.8</td>
<td>7.3</td>
<td>28.8</td>
<td>24.9</td>
</tr>
<tr>
<td>FTI Consulting, Inc. (NYSE:FTI)</td>
<td>83.8%</td>
<td>1,990.6</td>
<td>4.1%</td>
<td>262.0</td>
<td>13.2%</td>
<td>2,598.5</td>
<td>1.3</td>
<td>9.9</td>
<td>11.3</td>
</tr>
<tr>
<td>Huron Consulting Group Inc. (NasdaqGS:HURN)</td>
<td>85.2%</td>
<td>775.6</td>
<td>14.0%</td>
<td>92.7</td>
<td>12.0%</td>
<td>1,357.3</td>
<td>1.7</td>
<td>14.6</td>
<td>12.7</td>
</tr>
<tr>
<td>ICF International, Inc. (NasdaqGS:ICFI)</td>
<td>79.8%</td>
<td>1,281.2</td>
<td>4.3%</td>
<td>111.4</td>
<td>8.7%</td>
<td>1,463.5</td>
<td>1.1</td>
<td>13.1</td>
<td>10.7</td>
</tr>
<tr>
<td>Navigant Consulting, Inc. (NYSE:NVGT)</td>
<td>97.1%</td>
<td>957.4</td>
<td>5.2%</td>
<td>123.1</td>
<td>12.9%</td>
<td>805.9</td>
<td>0.8</td>
<td>6.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Resources Connection, Inc. (NasdaqGS:RECN)</td>
<td>84.8%</td>
<td>723.6</td>
<td>6.7%</td>
<td>63.0</td>
<td>8.7%</td>
<td>541.6</td>
<td>0.7</td>
<td>8.6</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Median | 84.8% | $937.8 | 6.5% | $108.4 | 11.7% | $1,510.4 | 1.3x | 12.6x | 11.3x |
Mean | 85.8% | 7.2% | 12.6% | 1.9x | 13.2x | 12.8x |

Consulting historical EV/EBITDA multiples

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Education and Training
Sector update | Q4 2018
Education & Training

Transaction in focus

December 18, 2018 – Cambium Learning Group, Inc. (Cambium or the Company), a leading educational technology solutions company committed to helping all students reach their full potential, announced that it has completed its previously announced sale to certain affiliates of Veritas Capital, a leading private equity investment firm. Cambium is an award winning educational technology solutions leader dedicated to helping all students reach their potential through individualized and differentiated instruction. Using a research based, personalized approach, Cambium delivers SaaS resources and instructional products that engage students and support teachers in fun, positive, safe, and scalable environments.

Select Education and Training M&A transactions

<table>
<thead>
<tr>
<th>Close date</th>
<th>Target/Acquiror</th>
<th>Target business description</th>
<th>Enterprise value (&quot;EV&quot;)</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>December-18</td>
<td>Cambium Learning Group, Inc.</td>
<td>Provides educational technology solutions in the United States and internationally.</td>
<td>725.2</td>
<td>4.5</td>
<td>24.4</td>
</tr>
<tr>
<td>November-18</td>
<td>The Learning House, Inc.</td>
<td>Develops a cloud-based technology platform for enabling colleges and universities to create, manage, and develop online degrees and programs.</td>
<td>200.0</td>
<td>3.3</td>
<td>28.6</td>
</tr>
<tr>
<td>August-18</td>
<td>Capella Education Company</td>
<td>Provides online postsecondary education and job-ready skills services in the United States.</td>
<td>797.0</td>
<td>1.8</td>
<td>11.5</td>
</tr>
<tr>
<td>April-18</td>
<td>CEB Talent Assessment</td>
<td>Engages in the development, implementation, and sale of objective assessment products and services worldwide.</td>
<td>400.0</td>
<td>4.1</td>
<td>10.5</td>
</tr>
<tr>
<td>March-18</td>
<td>NGRAIN (Canada) Corporation</td>
<td>Designs and develops 3D technology solutions that support industrial activities, such as inspection, maintenance, and training.</td>
<td>2.0</td>
<td>2.1</td>
<td>7.6</td>
</tr>
</tbody>
</table>

### Education & Training public comparables

#### Education

<table>
<thead>
<tr>
<th>Company (Ticker)</th>
<th>% of 52 Week high</th>
<th>LTM revenue</th>
<th>LTM EBITDA</th>
<th>EBITDA margin</th>
<th>Enterprise value</th>
<th>LTM EV/Revenue</th>
<th>LTM EV/EBITDA</th>
<th>NTM EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Public Education, Inc. (Nasdaq: APEI)</td>
<td>65.8%</td>
<td>$298.8</td>
<td>$55.3</td>
<td>18.5%</td>
<td>$301.4</td>
<td>1.0 x</td>
<td>5.4 x</td>
<td>5.7 x</td>
</tr>
<tr>
<td>Capella Education Company (Nasdaq: CPLA)</td>
<td>98.2%</td>
<td>442.6</td>
<td>71.6</td>
<td>16.2%</td>
<td>1,057.8</td>
<td>2.4</td>
<td>14.8</td>
<td>11.7</td>
</tr>
<tr>
<td>Career Education Corporation (Nasdaq: CEOCO)</td>
<td>66.0%</td>
<td>578.9</td>
<td>97.6</td>
<td>16.9%</td>
<td>699.9</td>
<td>1.2</td>
<td>7.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Adtalem Global Education Inc. (NYSE:ATEGE)</td>
<td>81.5%</td>
<td>1,222.3</td>
<td>273.7</td>
<td>22.4%</td>
<td>2,708.3</td>
<td>2.2</td>
<td>9.9</td>
<td>9.3</td>
</tr>
<tr>
<td>Grand Canyon Education, Inc. (Nasdaq: LOPE)</td>
<td>69.8%</td>
<td>939.4</td>
<td>332.5</td>
<td>35.4%</td>
<td>4,319.9</td>
<td>4.6</td>
<td>13.0</td>
<td>19.5</td>
</tr>
<tr>
<td>Lincoln Educational Services Corporation (Nasdaq: LINC)</td>
<td>86.4%</td>
<td>260.5</td>
<td>7.2</td>
<td>2.7%</td>
<td>82.9</td>
<td>0.3</td>
<td>11.6</td>
<td>6.9</td>
</tr>
<tr>
<td>Strategic Education, Inc. (Nasdaq: STRA)</td>
<td>70.4%</td>
<td>510.8</td>
<td>67.8</td>
<td>13.3%</td>
<td>1,986.5</td>
<td>3.9</td>
<td>29.3</td>
<td>10.1</td>
</tr>
<tr>
<td>Universal Technical Institute, Inc. (NYSE:UTI)</td>
<td>91.2%</td>
<td>317.0</td>
<td>(18.9)</td>
<td>N/A</td>
<td>149.9</td>
<td>0.5</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Median**

- 75.9% Week high
- $476.7 LTM revenue
- 16.9% LTM EBITDA margin
- $873.9 Enterprise value
- 1.7 x LTM EV/Revenue
- 1.7 x LTM EV/EBITDA
- 9.3 x NTM EV/EBITDA

**Mean**

- 78.7% Week high
- 1.1% LTM revenue CAGR (3 Yr)
- 17.9% LTM EBITDA margin
- $873.9 Enterprise value
- 2.0 x LTM EV/Revenue
- 2.0 x LTM EV/EBITDA
- 9.9 x NTM EV/EBITDA

#### Training

<table>
<thead>
<tr>
<th>Company (Ticker)</th>
<th>% of 52 Week high</th>
<th>LTM revenue</th>
<th>LTM EBITDA</th>
<th>EBITDA margin</th>
<th>Enterprise value</th>
<th>LTM EV/Revenue</th>
<th>LTM EV/EBITDA</th>
<th>NTM EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franklin Covey Co. (NYSE:FC)*</td>
<td>80.7%</td>
<td>$215.7</td>
<td>$11.1</td>
<td>5.2%</td>
<td>$376.8</td>
<td>1.7 x</td>
<td>33.9 x</td>
<td>17.2 x</td>
</tr>
<tr>
<td>GP Strategies Corporation (NYSE: GPX)</td>
<td>57.4%</td>
<td>513.8</td>
<td>28.5</td>
<td>5.6%</td>
<td>342.0</td>
<td>0.7</td>
<td>12.0</td>
<td>7.7</td>
</tr>
<tr>
<td>John Wiley &amp; Sons, Inc. (NYSE: JW.A)</td>
<td>72.7%</td>
<td>1,792.5</td>
<td>317.9</td>
<td>17.7%</td>
<td>3,395.1</td>
<td>1.9</td>
<td>10.7</td>
<td>8.8</td>
</tr>
<tr>
<td>Wilmington plc (LSE: WIL)</td>
<td>67.4%</td>
<td>161.1</td>
<td>32.4</td>
<td>20.1%</td>
<td>253.2</td>
<td>1.6</td>
<td>7.8</td>
<td>8.0</td>
</tr>
</tbody>
</table>

**Median**

- 67.4% Week high
- 1.7% LTM revenue CAGR (3 Yr)
- 17.7% LTM EBITDA margin
- $342.0 Enterprise value
- 1.6 x LTM EV/Revenue
- 1.6 x LTM EV/EBITDA
- 8.0 x NTM EV/EBITDA

**Mean**

- 65.8% Week high
- 3.6% LTM revenue CAGR (3 Yr)
- 14.5% LTM EBITDA margin
- $342.0 Enterprise value
- 1.4 x LTM EV/Revenue
- 1.4 x LTM EV/EBITDA
- 8.2 x NTM EV/EBITDA

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### Education and Training historical EV/EBITDA multiples

#### Education and Training historical EV/EBITDA multiples

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* Financial information was withheld from median and mean calculations to normalize the data set.
Staffing and Human Resources trend

Increased candidate engagement through texting

While it is common practice for recruiting and staffing agencies to assess potential candidates through phone calls, some industry operators suggest that interviewing via texting may present an opportunity for recruiters to work faster and hire better in a candidate-led market. Some of the potential benefits of interviewing via texting include greater communication optionality for candidates that are currently working, more personalized conversations, and an increased ability to connect with multiple candidates simultaneously.

Transaction in focus

January 22, 2019 - Medicus Healthcare Solutions (Medicus), a privately held temporary physician staffing company, is in a late stage auction process said two sources briefed on the matter. Medicus was projected to generate approximately $225 million in 2017 revenues and had an EBITDA margin of roughly 12 percent, according to last year's report. The Blackstone Group has been circling Medicus, the two sources said. AMN Healthcare Services (NYSE:AMN) is also a potential buyer, the first source said. A Medicus sale would come amid a lively M&A market for medical staffing businesses and a shortage of highly trained doctors and nurses nationwide.

Select Staffing and Human Resources M&A transactions

<table>
<thead>
<tr>
<th>Close date</th>
<th>Target/Acquiror</th>
<th>Target business description</th>
<th>Enterprise value (&quot;EV&quot;)</th>
<th>EV/Revenue</th>
<th>EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending</td>
<td>DHI Group, Inc. TCS Capital Management, LLC</td>
<td>Provides data, insights, and connections services to professional communities in the United States and internationally.</td>
<td>$156.8</td>
<td>0.8 x</td>
<td>5.8 x</td>
</tr>
<tr>
<td>November-18</td>
<td>Martin Healthcare Group</td>
<td>Provides physician staffing and practice management services for hospitals.</td>
<td>25.0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>October-18</td>
<td>Envision Healthcare Corporation KKR &amp; Co. L.P.</td>
<td>Provides various healthcare services in the United States.</td>
<td>10,418.6</td>
<td>1.3</td>
<td>9.7</td>
</tr>
<tr>
<td>August-18</td>
<td>HeadFirst Source Group N.V. Ruvercap Sourcehub Ag</td>
<td>Provides external professionals hiring services in the Benelux Union.</td>
<td>54.1</td>
<td>0.3</td>
<td>8.7</td>
</tr>
<tr>
<td>May-18</td>
<td>PeopleFluent, Inc. Learning Technologies Group plc</td>
<td>Provides Software-as-a-Service talent management solutions.</td>
<td>150.0</td>
<td>1.4</td>
<td>11.2</td>
</tr>
<tr>
<td>April-18</td>
<td>ECS Federal, LLC On Assignment, Inc. (nka:ASGN Incorporated)</td>
<td>ECS Federal, LLC provides information technology services to military, federal civilian, and commercial clients.</td>
<td>775.0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Staffing and Human Resources public comparables

#### Executive Recruiters

<table>
<thead>
<tr>
<th>Company (Ticker)</th>
<th>% of 52 Week high</th>
<th>LTM revenue</th>
<th>Revenue CAGR (3 Yr)</th>
<th>LTM EBITDA</th>
<th>EBITDA margin</th>
<th>Enterprise value</th>
<th>LTM EV/Revenue</th>
<th>LTM EV/EBITDA</th>
<th>NTM EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adecco Group AG (SWX:ADEN)</td>
<td>62.4 %</td>
<td>$27,648.4</td>
<td>3.4 %</td>
<td>$1,254.8</td>
<td>4.5 %</td>
<td>$9,763.8</td>
<td>0.4 x</td>
<td>7.8 x</td>
<td>7.4 x</td>
</tr>
<tr>
<td>ASGN Incorporated (NYSE:ASGN)</td>
<td>64.6 %</td>
<td>$3,149.2</td>
<td>17.8</td>
<td>345.2</td>
<td>11.0</td>
<td>4,310.7</td>
<td>1.4</td>
<td>12.5</td>
<td>9.7</td>
</tr>
<tr>
<td>Barrett Business Services, Inc. (NasdaqGS:BBSI)</td>
<td>59.2 %</td>
<td>$947.6</td>
<td>9.5</td>
<td>38.6</td>
<td>4.1</td>
<td>400.1</td>
<td>0.4</td>
<td>10.4</td>
<td>10.6</td>
</tr>
<tr>
<td>Hays plc (LSE:HAS)</td>
<td>71.1 %</td>
<td>$7,591.5</td>
<td>14.4</td>
<td>338.5</td>
<td>4.5</td>
<td>2,701.7</td>
<td>0.4</td>
<td>8.0</td>
<td>7.4</td>
</tr>
<tr>
<td>Impellam Group PLC (AIM:IPEL)</td>
<td>87.0 %</td>
<td>$2,908.1</td>
<td>12.6</td>
<td>69.5</td>
<td>4.4</td>
<td>467.6</td>
<td>0.2</td>
<td>6.7</td>
<td>6.9</td>
</tr>
<tr>
<td>Inseffity, Inc. (NYSE:NSP)</td>
<td>81.6 %</td>
<td>$3,688.3</td>
<td>13.1</td>
<td>196.5</td>
<td>5.3</td>
<td>3,872.3</td>
<td>1.0</td>
<td>19.7</td>
<td>14.6</td>
</tr>
<tr>
<td>Kelly Services, Inc. (NasdaqGS:KELY.A)</td>
<td>72.2 %</td>
<td>$5,521.5</td>
<td>0.2</td>
<td>108.4</td>
<td>2.0</td>
<td>889.5</td>
<td>0.2</td>
<td>8.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Xforce Inc. (NasdaqGS:KFRC)</td>
<td>75.4 %</td>
<td>$1,403.0</td>
<td>2.3</td>
<td>85.2</td>
<td>6.1</td>
<td>892.1</td>
<td>0.6</td>
<td>10.5</td>
<td>9.1</td>
</tr>
<tr>
<td>ManpowerGroup Inc. (NYSE:MAN)</td>
<td>53.5 %</td>
<td>$22,235.5</td>
<td>4.5</td>
<td>939.8</td>
<td>4.2</td>
<td>5,010.6</td>
<td>0.2</td>
<td>5.3</td>
<td>5.8</td>
</tr>
<tr>
<td>PageGroup plc (LSE:PAGE)</td>
<td>72.6 %</td>
<td>$1,913.2</td>
<td>10.8</td>
<td>181.5</td>
<td>9.5</td>
<td>1,737.8</td>
<td>0.9</td>
<td>9.6</td>
<td>7.9</td>
</tr>
<tr>
<td>Randstad NV (ENXTAM:RAND)</td>
<td>68.8 %</td>
<td>$27,522.7</td>
<td>8.2</td>
<td>1,267.5</td>
<td>4.6</td>
<td>10,168.6</td>
<td>0.4</td>
<td>8.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Robert Half International Inc. (NYSE:RHI)</td>
<td>75.3 %</td>
<td>$5,664.9</td>
<td>4.2</td>
<td>628.1</td>
<td>11.1</td>
<td>6,822.9</td>
<td>1.2</td>
<td>10.9</td>
<td>9.9</td>
</tr>
<tr>
<td>STXthree plc (LSE:STHR)</td>
<td>63.7 %</td>
<td>$1,587.5</td>
<td>13.4</td>
<td>65.3</td>
<td>4.2</td>
<td>426.6</td>
<td>0.3</td>
<td>6.5</td>
<td>5.6</td>
</tr>
<tr>
<td>TrueBlue, Inc. (NYSE:TBI)</td>
<td>80.0 %</td>
<td>$2,518.7</td>
<td>(0.8)</td>
<td>126.5</td>
<td>5.0</td>
<td>1,011.7</td>
<td>0.4</td>
<td>8.0</td>
<td>7.6</td>
</tr>
</tbody>
</table>

**Median**

| Median | 62.4 % | $27,648.4 | 3.4 % | $1,254.8 | 4.5 % | $9,763.8 | 0.4 x | 7.8 x | 7.4 x |

**Mean**

| Mean | 72.2 % | $5,521.5 | 0.2 | 108.4 | 2.0 | 889.5 | 0.2 | 8.2 | 7.0 |

**Median**

| Median | 62.4 % | $27,648.4 | 3.4 % | $1,254.8 | 4.5 % | $9,763.8 | 0.4 x | 7.8 x | 7.4 x |

**Mean**

| Mean | 72.2 % | $5,521.5 | 0.2 | 108.4 | 2.0 | 889.5 | 0.2 | 8.2 | 7.0 |

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### Staffing and Human Resources historical EV/EBITDA multiples

[Graph showing EV/EBITDA multiples for Staffing and Human Resources, S&P 500 Index, and Executive Recruiters.]

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Transaction Processing
Sector update | Q4 2018
Voice commerce transforming the payments space¹

As the older subgroup of millennials approach their peak earning years, industry experts expect that the voice assisted retail segment will experience robust growth. Currently 8 percent of people use voice commands to make purchases, but this number is projected to increase to 31 percent of US adults by 2022. The propagation of new payment channels, including voice commerce, will be driven by the 30 billion internet of things (IoT) and connected devices expected to join the internet over the next 2 years. As consumers are continuously groomed to leverage the voice activated technology for internet queries and other activities, the payments space will likely endure further disruption from devices that can execute transactions and other commerce functions.

Transaction in focus²

January 16, 2019 - Financial technology provider, Fiserv Inc (Fiserv), announced it had agreed to buy payment processor First Data Corp (First Data) in a $22 billion all stock deal, the biggest ever acquisition in the booming market for digital payments. Fiserv said it had secured debt to refinance First Data’s existing $17 billion of obligations, and planned to return to its historical leverage levels within 24 months after the deal closes. The deal illustrates how providers of commoditized banking services are seeking to diversify by developing or acquiring technology that powers transactions such as credit card purchases and payments through a mobile phone.

Select Transaction Processing M&A transactions³

<table>
<thead>
<tr>
<th>Close date</th>
<th>Target/ Acquiror</th>
<th>Target business description</th>
<th>Enterprise value (“EV”)</th>
<th>EV/ Revenue</th>
<th>EV/ EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending</td>
<td>First Data Corporation/Fiserv, Inc.</td>
<td>Provides electronic commerce solutions for merchants, financial institutions, and card issuers worldwide.</td>
<td>$41,540.6</td>
<td>4.8 x</td>
<td>12.8 x</td>
</tr>
<tr>
<td>December-18</td>
<td>JetPay Corporation/NCR Corporation</td>
<td>Offers credit card acceptance, payment processing, pre-paid card services, payroll services, and human capital management.</td>
<td>179.8</td>
<td>2.2</td>
<td>50.5</td>
</tr>
<tr>
<td>August-18</td>
<td>Cotiviti Holdings, Inc./Versend Technologies, Inc.</td>
<td>Provides analytics-driven payment accuracy and spend management solutions primarily for the healthcare sector in the United States, Canada, the United Kingdom, and India.</td>
<td>4,929.3</td>
<td>6.7</td>
<td>17.1</td>
</tr>
<tr>
<td>May-18</td>
<td>Intermedix Corporation/R1 RCM Inc.</td>
<td>Provides technology enabled solutions for the healthcare industry in the United States.</td>
<td>460.0</td>
<td>2.4</td>
<td>9.6</td>
</tr>
<tr>
<td>January-18</td>
<td>Worldpay Group plc/Vantiv, Inc. (nka:Worldpay, Inc.)</td>
<td>Provides payment processing technology and solutions for merchant customers worldwide.</td>
<td>11,527.3</td>
<td>7.5</td>
<td>19.7</td>
</tr>
</tbody>
</table>

### Transaction Processing public comparables

<table>
<thead>
<tr>
<th>Company (Ticker)</th>
<th>% of 52 Week high</th>
<th>LTM Revenue</th>
<th>LTM EBITDA</th>
<th>EBITDA margin</th>
<th>Enterprise value</th>
<th>LTM EV/Revenue</th>
<th>LTM EV/EBITDA</th>
<th>NTM EV/EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadridge Financial Solutions, Inc. (NYSE:BR)</td>
<td>72.4 %</td>
<td>$4,377.9</td>
<td>17.0 %</td>
<td>$836.5</td>
<td>19.1 %</td>
<td>$12,626.8</td>
<td>2.9 x</td>
<td>15.1 x</td>
</tr>
<tr>
<td>Cardtronics plc (NasdaqGS:CATM)</td>
<td>75.4</td>
<td>1,380.3</td>
<td>5.3</td>
<td>297.4</td>
<td>21.5</td>
<td>2,149.6</td>
<td>1.6</td>
<td>7.2</td>
</tr>
<tr>
<td>Conduent Incorporated (NYSE:CNDT)</td>
<td>51.4</td>
<td>5,604.0</td>
<td>0.0</td>
<td>682.0</td>
<td>12.2</td>
<td>3,674.8</td>
<td>0.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Euronet Worldwide, Inc. (NasdaqGS:EFT)</td>
<td>90.9</td>
<td>2,491.9</td>
<td>12.2</td>
<td>463.9</td>
<td>18.6</td>
<td>5,472.0</td>
<td>2.2</td>
<td>11.8</td>
</tr>
<tr>
<td>EVERTEC, Inc. (NYSE:EVTC)</td>
<td>93.1</td>
<td>435.3</td>
<td>5.4</td>
<td>159.3</td>
<td>36.6</td>
<td>2,463.4</td>
<td>5.7</td>
<td>15.5</td>
</tr>
<tr>
<td>Global Payments Inc. (NYSE:GPN)</td>
<td>87.8</td>
<td>3,540.1</td>
<td>0.0</td>
<td>1,270.0</td>
<td>35.9</td>
<td>22,641.0</td>
<td>6.4</td>
<td>17.8</td>
</tr>
<tr>
<td>Jack Henry &amp; Associates, Inc. (NasdaqGS:JHKG)</td>
<td>79.1</td>
<td>1,567.0</td>
<td>7.1</td>
<td>484.4</td>
<td>30.9</td>
<td>9,895.3</td>
<td>6.3</td>
<td>20.4</td>
</tr>
<tr>
<td>Mastercard Incorporated (NYSE:MA)</td>
<td>88.4</td>
<td>14,455.0</td>
<td>14.8</td>
<td>8,577.0</td>
<td>59.3</td>
<td>203,803.2</td>
<td>14.1</td>
<td>23.8</td>
</tr>
<tr>
<td>PayPal Holdings, Inc. (NasdaqGS:PYPL)</td>
<td>96.5</td>
<td>14,969.0</td>
<td>19.0</td>
<td>2,699.0</td>
<td>18.0</td>
<td>98,036.7</td>
<td>6.6</td>
<td>36.7</td>
</tr>
<tr>
<td>The Western Union Company (NYSE:WU)</td>
<td>83.9</td>
<td>5,626.6</td>
<td>0.7</td>
<td>1,365.8</td>
<td>24.3</td>
<td>10,465.4</td>
<td>1.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Total System Services, Inc. (NYSE:TSS)</td>
<td>85.9</td>
<td>4,283.4</td>
<td>16.7</td>
<td>1,067.1</td>
<td>24.9</td>
<td>19,139.7</td>
<td>4.5</td>
<td>17.9</td>
</tr>
<tr>
<td>Visa Inc. (NYSE:V)</td>
<td>90.6</td>
<td>20,609.0</td>
<td>14.1</td>
<td>13,862.0</td>
<td>67.3</td>
<td>312,984.3</td>
<td>15.2</td>
<td>22.6</td>
</tr>
<tr>
<td>Worldpay, Inc. (NYSE:WP)</td>
<td>79.9</td>
<td>3,941.3</td>
<td>9.0</td>
<td>1,322.4</td>
<td>33.6</td>
<td>32,557.3</td>
<td>8.3</td>
<td>24.6</td>
</tr>
<tr>
<td>WEX Inc. (NYSE:WEX)</td>
<td>77.7</td>
<td>1,439.7</td>
<td>19.0</td>
<td>535.4</td>
<td>37.2</td>
<td>8,673.8</td>
<td>6.0</td>
<td>16.2</td>
</tr>
</tbody>
</table>

**Median**

- 84.9 %
- $4,112.3
- 10.6 %
- $951.8
- 27.9 %
- $11,546.1
- 5.8 x
- 17.0 x
- 13.5 x

**Mean**

- 82.4 %
- 10.0 %
- 31.4 %
- 5.9 x
- 17.3 x
- 14.1 x

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### Transaction Processing historical EV/EBITDA multiples

![Graph showing historical EV/EBITDA multiples for Transaction Processing and S&P 500 Index from Q2 2012 to Q4 2018.](chart)

- **Transaction Processing**
- **S&P 500 Index**

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