Market Context

We are currently experiencing an unprecedented market environment with the onset of COVID-19-related social distancing, and lockdowns across the world resulting in a complete slowdown of economic activity. COVID-19 has introduced a level of unpredictability not previously seen by investors, and it continues to drive sustained levels of market volatility. Certain sub-sectors of tech (online travel, ridesharing, etc.) have been hit especially hard. While segments of the enterprise software market are core enablers of remote working and accordingly are seeing an uplift in utilization, the sector is not immune to broad sell-offs.

Pagemill Partners-tracked software vertical indices have experienced drops of up to c.30% from their peak. Even less volatile large-cap vendors have experienced a sizeable drop in share price with our Large-Cap Index trading at c.17% below its peak. It is unclear if we have hit a bottom yet and the overall long-term economic impact of COVID-19 on public markets is yet to be determined. The impact of COVID-19 is also being felt on large-cap tech M&A with deals larger than USD 1 billion (bn) being pulled in the past two weeks (e.g. Thoma Bravo’s proposed acquisition of Imprivata) given concerns around raising debt financing and the valuation impact from the current market environment.

Our Perspective

Across our network, businesses are adjusting swiftly and planning for worst case scenarios. Investment priorities are being re-evaluated with a focus on flexible resource allocation, for example towards customer success, as pipelines are inevitably impacted. Software companies appear to be better positioned to transition to remote work and benefit from recurring revenue and cash upfront models which provide downside protection, at least over the short term.

Sectors such as communication and collaboration, infrastructure technology, and digital commerce are natural beneficiaries of remote working and social distancing. Our sector multiples analysis indicates the smaller impact suffered by these stocks. Other business models such as analytics and some cyber security businesses with utility-based pricing models are also seeing near term uplifts. While no business will escape some near term disruption, we are also seeing ambitious management teams of more mature businesses looking forward to the opportunities for market share gains and potential consolidation.

Despite the continued market volatility and slowdown in large-cap M&A, we expect mid-market M&A for deals under $300 million (mn) especially for certain sub-sectors of software to pick back up in Q3 and remain strong through the end of 2020 and heading in 2021. Lastly, we see continued engagement from private equity firms with existing portfolios which are less exposed to the downturn, and/or with largely uncommitted funds, while strategic investors have taken a more conservative stance.
Pagemill Partners Tracked Software Verticals

**EV/CY21 Revenue Multiples**
(As of March 31, 2020 vs. February 15, 2020)

<table>
<thead>
<tr>
<th>Vertical</th>
<th>Feb 15, 2020</th>
<th>Mar 20, 2020</th>
<th>% change in mean multiple between dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI and Analytics</td>
<td>6.7x</td>
<td>8.5x</td>
<td>29.9%</td>
</tr>
<tr>
<td>Communication and Collaboration</td>
<td>6.2x</td>
<td>8.2x</td>
<td>27.4%</td>
</tr>
<tr>
<td>CRM and Marketing</td>
<td>5.8x</td>
<td>6.4x</td>
<td>18.0%</td>
</tr>
<tr>
<td>Cyber Security</td>
<td>6.4x</td>
<td>7.1x</td>
<td>22.6%</td>
</tr>
<tr>
<td>Engineering</td>
<td>5.2x</td>
<td>7.2x</td>
<td>26.4%</td>
</tr>
<tr>
<td>ERP and SCM</td>
<td>4.7x</td>
<td>6.9x</td>
<td>25.3%</td>
</tr>
<tr>
<td>Financial and Accounting</td>
<td>5.4x</td>
<td>7.7x</td>
<td>27.3%</td>
</tr>
<tr>
<td>Financial Services</td>
<td>5.0x</td>
<td>4.9x</td>
<td>23.3%</td>
</tr>
<tr>
<td>HCM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td>5.7x</td>
<td>4.9x</td>
<td>12.5%</td>
</tr>
<tr>
<td>Vertical Software</td>
<td>6.1x</td>
<td>5.0x</td>
<td>23.3%</td>
</tr>
</tbody>
</table>

**Index Value Performance and Leverage Ratios**
(As of March 31, 2020)

<table>
<thead>
<tr>
<th></th>
<th>Vs. YTD</th>
<th>Vs. February 15, 2020</th>
<th>Vs. 52-week High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue multiples</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI and Analytics</td>
<td>(14.0%)</td>
<td>(28.5%)</td>
<td>(28.4%)</td>
</tr>
<tr>
<td>Communication and</td>
<td>20.0%</td>
<td>(2.4%)</td>
<td>(4.8%)</td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRM and Marketing</td>
<td>(7.3%)</td>
<td>(21.5%)</td>
<td>(22.1%)</td>
</tr>
<tr>
<td>Cyber Security</td>
<td>(13.4%)</td>
<td>(16.9%)</td>
<td>(24.2%)</td>
</tr>
<tr>
<td>Engineering</td>
<td>(12.9%)</td>
<td>(21.4%)</td>
<td>(21.9%)</td>
</tr>
<tr>
<td>ERP and SCM</td>
<td>(2.6%)</td>
<td>(23.3%)</td>
<td>(16.1%)</td>
</tr>
<tr>
<td>Financial and Accounting</td>
<td>(13.0%)</td>
<td>(26.4%)</td>
<td>(23.8%)</td>
</tr>
<tr>
<td>Financial Services</td>
<td>(20.1%)</td>
<td>(26.4%)</td>
<td>(26.2%)</td>
</tr>
<tr>
<td>HCM</td>
<td>(22.7%)</td>
<td>(30.1%)</td>
<td>(30.5%)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>(5.5%)</td>
<td>(12.6%)</td>
<td>(13.5%)</td>
</tr>
<tr>
<td>Vertical Software</td>
<td>(10.6%)</td>
<td>(20.0%)</td>
<td>(20.3%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total Debt /</th>
<th>Net Debt /</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Cap</td>
<td>14.2%</td>
<td>11.6%</td>
</tr>
<tr>
<td></td>
<td>11.2%</td>
<td>7.7%</td>
</tr>
<tr>
<td></td>
<td>11.5%</td>
<td>(5.0%)</td>
</tr>
<tr>
<td></td>
<td>11.9%</td>
<td>(6.5%)</td>
</tr>
<tr>
<td></td>
<td>9.8%</td>
<td>5.7%</td>
</tr>
<tr>
<td></td>
<td>10.1%</td>
<td>(1.9%)</td>
</tr>
<tr>
<td></td>
<td>11.0%</td>
<td>4.3%</td>
</tr>
<tr>
<td></td>
<td>17.5%</td>
<td>22.2%</td>
</tr>
<tr>
<td></td>
<td>15.1%</td>
<td>3.5%</td>
</tr>
<tr>
<td></td>
<td>11.9%</td>
<td>(2.9%)</td>
</tr>
<tr>
<td></td>
<td>24.1%</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

EV = Enterprise Value; CY = Calendar Year; Market Cap = Market Capitalization, Net Debt = Total Debt less Cash

1 Revenue multiples of each vertical calculated as the mean of constituent multiples
2 Index value of each vertical based on dividend adjusted value of constituents, weighted by market capitalization
3 Leverage ratios weighted by constituent market capitalizations

Source: Capital IQ as of March 31, 2020
Pagemill Partners Large-Cap Index

Performance of Market Indices for the Last 10 Years

Re-based Index Value

<table>
<thead>
<tr>
<th>0%</th>
<th>100%</th>
<th>200%</th>
<th>300%</th>
<th>400%</th>
<th>500%</th>
</tr>
</thead>
</table>

---

**Re-based Index Value**

- **6.8x vs. 4.9x**
  - EV/NTM Rev
  - Current vs. 10-yr Median

**Median Large Cap Index Multiples**

- **(17.0%)**
  - vs. 15 Feb 2020
- **(7.2%)**
  - vs. YTD
- **(17.0%)**
  - vs. 52-week high

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**EV/NTM Revenue**

- **9.0x**
- **8.0x**
- **7.0x**
- **6.0x**
- **5.0x**
- **4.0x**
- **3.0x**
- **2.0x**
- **1.0x**
- **0.0x**

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Source: Capital IQ as of March 31, 2020
Pagemill Partners SaaS Index

Performance of Market Indices for the Last 10 Years

EV/NTM Revenue

EV = Enterprise Value; NTM = Next 12 Months
Pagemill Partners SaaS Index includes: TWOU, BNFT, BOX, CSLT, CSOD, FIVN, HUBS, LPSN, LOGM, NEWR, PFPT, QLYS, RP, RING, CRM, NOW, SPLK, SPSC, VEEV, WIX, WDAY, ZEN, SCWX, APPF, TEAM, TLWD, TLND, TTD, UPLD, WK, YEXT, ZIXI, ADBE, DBX, ZUO, DOCU, SMAR, ZS, SVMK and PD.

Source: Capital IQ as of March 31, 2020
Pagemill Partners Tracked Software Universe

BI and Analytics
- alteryx
- DATADOG
- DOMO
- dynatrace
- MicroStrategy
- New Relic
- pagerduty
- splunk>
- talend
teradata
- VERITONE.

Communication and Collaboration
- 8x8
- ATLASSIAN
- AVAYA
- box
- DocuSign
- Dropbox
- everbridge*
- Extreme
- networks
- Five9
- Juniper
- Networks
- RingCentral
- Slack
- smartsheet
- TouchPal
- twilio
- Vonage
- Business
- zoom

ERP and SCM
- Altair
- ANSYS
- Aspentech
- AVEVA
- Autodesk
- CADENCE
- caspian
- ptc
- synopsys
- Trimble

Financial and Accounting
- Ameriprise
- Descartes
- Kinaxis
- Manhattan
- Associates.
sap
- ServiceNow
- SPS Commerce
- technologyone
- tecsys
- TOTVS
- Workiva
- Wolters Kluwer

Financial Services
- bill.com
- Broadridge
- Bottomline
- GreenSky
- Guidewire
- i3
- JACK HENRY & ASSOCIATES INC.
- Money Forward
- Reckon
- Sage
- Workiva
- Wolters Kluwer

HCM
- Advance
- Benefitfocus
- Ceridian
- Cornerstone
- Docebo
- Paychex
- Paycom
- PayGroup
- Paylocity
- Q2
- SimCorp
- SS&C
- Temenos
- TriNet
- Workday.

Source: S&P Global Market Intelligence as of March 31, 2020, and includes the most actively traded software companies for respective covered sectors, excluding most microcap companies.

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Global Software Market Alert | April 2020

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