## Quarterly Technology M&A Review

## Q4 2014 – Technology M&A Slows for the Holidays, Still Caps a Banner year

When compared to most recent historical levels (2006-2013), 2014 was the most active year in technology M&A, with aggregate value totaling approximately \$317.1B. This represents an 80% and 31% increase over 2012 and 2013, respectively.

The fourth quarter is typically slower due to the holiday season in the U.S. and 2014 was no different. On a quarterly basis, Q4 deal value totaled \$60.9B, a 40% decrease from the previous quarter. Median deal value also decreased sharply to \$29.7M, representing a quarter-over-quarter decrease of 39%. All sectors showed declines in deal value with the exception of the Semiconductor and the IT Services sectors. The decline in deal value was driven largely by fewer \$1B+ transactions, as well as a lack of any \$10B+ transactions. In total, there were 15 \$1B+ transactions during the quarter, representing \$37.8B, or 62% of the aggregate deal value. This compares to \$82.4B, or 82% of the aggregate deal value in the previous quarter. The largest transaction for the quarter was Altice SA's acquisition of Portugal Telecom for \$8.5B.

With 1,001 total deals announced during the quarter, deal volume remained at a relatively high level compared to previous quarters. The 2014 year finished with 3,819 announced deals which represents a 22% increase over 2013's deal count.

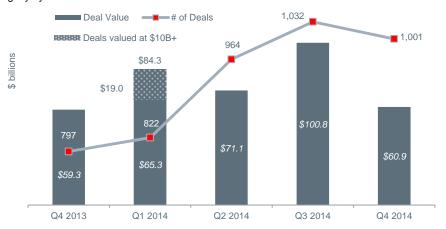
Median deal value decreased to \$29.7M, which may be indicative of a shift down market for large strategic acquirers. The median valuation for the quarter was 2.3x revenue, a 8% decrease from Q3 2014, but still meaningfully higher than the Q1 2009 – Q3 2014 median of 1.7x revenue. The Internet & Digital Media sector garnered the highest median valuations during the quarter at 2.6x revenue, followed by Software at 2.5x revenue.

Venture backed M&A activity showed significant declines in Q4 compared to the rest of 2014. In aggregate, VC-backed M&A value totaled \$3.2B at a median of 3.5x revenue, 5% less than the median for Q1 2009 – Q3 2014 of 3.7x revenue. There were only two \$400M+ transactions during the quarter; Yahoo's acquisition of BrightRoll for \$640M and Churchill Downs acquisition of Big Fish Games for \$485M. These two deals accounted for approximately 35% of disclosed VC-backed deal values during the quarter.

By count, the IPO market for technology companies strengthened in Q4 with fourteen IPOs on major exchanges worldwide, a 86% quarter-over-quarter increase. In aggregate, 2014 IPOs in the technology sector represented a total of \$41.0B and 20% of the entire worldwide IPO market. Technology IPO's were led by Alibaba for \$21.8B (BABA; +11%). Overall, technology IPOs performed relatively poorly with an average return of 7% compared to the global average return of 15% across all sectors. Nevertheless, there were several IPOs that outperformed including: TrueCar (TRUE: +128%), GoPro (GPRO; +102%), and TubeMogul (TUBE: +96%).

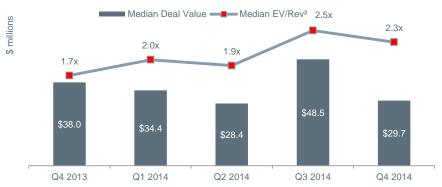
#### Technology M&A Overview<sup>1</sup>

**Deal Count & Deal Value.** Total deal value decreased to normalized levels in Q4 2014; a 40% decrease compared to the previous quarter but in line with Q4 2013. Deal volume decreased slightly by 3% over Q3 2014 with a more considerable increase of 26% over Q4 2013.

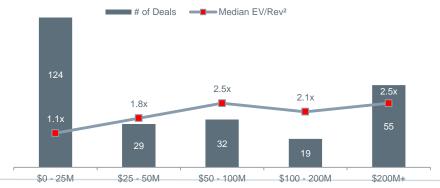


Removed the following for normalization purposes: Comcast/Time Warner (\$68.7B), AT&T/DIRECTV (\$67.1B), Altice/SFR (\$23.3B)

**Median Multiple & Valuation.** The median revenue multiple in Q4 2014 was 2.3x, an 8% decline from the prior quarter, and approximately 34% higher than the historical median (Q1 2009 – Q3 2014). Median deal value was \$29.7M in Q4 2014, lower than the previous quarter, and approximately 13% lower than the historical median (Q1 2009 – Q3 2014) of \$32.7M.



**Q4 2014 Disclosed Deal Count and Median Multiple by Deal Size**. During the quarter, there were 259 deals with disclosed transaction values. In line with previous quarters, larger deals generally garner higher multiples, however, this quarter was an exception with the \$100M - \$200M segment garnering lower multiples than the \$50M - \$100M segment.





## Pagemill Partners Quarterly Deal Highlight

# Spectrum Equity's recent investment in ExactBid underscores continued Private Equity interest in vertically focused SaaS businesses



Deal Value: Undisclosed

Pagemill Role: Exclusive advisor to ExactBid

ExactBid, based in San Jose, California, provides RIMS a SaaS-based solution for managing real estate appraisal and due diligence workflows on behalf of financial institutions. Over the last 14 years the Company has become the industry standard for commercial real estate workflow management and enables customers to streamline the process for RFP, bidding, and awarding of real estate appraisals and diligence reports. Hundreds of banks, including 18 of the top 25 U.S. real estate lenders use RIMS resulting in 30%+ of all U.S. commercial real estate appraisals being completed through ExactBid's two sided marketplace.

With market leading technology, strong reference customer list and stable base of recurring revenue, ExactBid attracted interest from both strategic acquirers and private equity sponsors. From the Pagemill team's initial discussions with Spectrum, it was clear that there was a strong fit with their investment strategy.

Spectrum brings significant vertical expertise, which will help accelerate ExactBid's growth. In conjunction with the transaction, Matt Cotter joined ExactBid as CEO. Prior to ExactBid, Mr. Cotter served as Senior Vice President of Sales and Marketing at Mortgagebot, a former Spectrum Equity portfolio company that was sold to Davis + Henderson in 2011. The investment from Spectrum will support ExactBid's rapid growth and continued development of RIMS.

Pagemill continues to see a strong level of interest from the private equity community throughout our practice. Private Equity provides an attractive alternative to management and shareholders by providing liquidity, capital required to scale the business or to pursue inorganic growth strategies, often while enabling retention of an interest in future success. In the last several years, vertically oriented SaaS businesses have garnered significant attention from private equity investors as platform investments. With high levels of recurring revenue and customer retention, complementary offerings can be built (or bought) and leveraged to drive increases in revenue per customer and profitable growth. We anticipate this trend will continue as private equity investors and the debt community have embraced investing in SaaS companies and helping scale them to be long term dominant solution providers within their target verticals.





#### M&A Overview - Active Technology Segments<sup>1</sup>

**M&A Activity by Segment.** During Q4 2014, Communications Services, Internet and Digital Media, IT Services, Semiconductors, and Software sub-segments accounted for 77% of all technology M&A deal value and 78% of total deal count. Of the 15 \$1B+ deals during the quarter, 11 fell into these categories. The Communications Services sector was the most active by value, with \$1B+ transactions during the quarter totaling \$14.9B in deal value, followed by the IT services sector, totaling nearly \$4.1B in deal value. For the sixth consecutive quarter, the IT Services and Software segments were the most active by volume, accounting for 28% and 27% of total Q4 deal count, respectively.

		Q4 2014			Median EV/Rev²				
Sector	Total Deal Count	Disclosed Value (\$B)	Median Value (\$M)	Q4 2013	Q3 2014	Q4 2014	Y/Y³ Delta	Q/Q⁴ Delta	
Communications Services	35	16.3	272.5	1.6x	2.3x	2.1x	33%	(7%)	
Internet and Digital Media	168	5.1	36.0	2.3x	3.9x	2.6x	11%	(34%)	
IT Services	277	12.0	20.3	0.9x	0.9x	0.8x	(15%)	(18%)	
Semiconductors	33	5.4	31.9	1.9x	2.2x	1.6x	(17%)	(29%)	
Software	267	8.1	21.5	2.7x	3.1x	2.5x	(5%)	(19%)	
Total: Active Sectors	780	46.8	31.9	1.9x	2.3x	2.1x	12%	(7%)	
Total: Overall Technology	1,001	60.8	29.7	1.7x	2.5x	2.3x	31%	(8%)	

#### M&A Activity - Active Technology Segments<sup>1</sup>

**Communications Services.** Of the 35 Communications deals completed during the quarter, 13 had disclosed values, totaling \$16.3B. There were seven deals valued at more than \$200M and the overall sector had a median valuation of 2.1x revenue. This is on par with the median of 2.3x revenue in the previous quarter. The historical median valuation (Q1 2009 – Q3 2014) for deals in the Communications Services sub-segment has been approximately 1.6x revenue.



Internet and Digital Media. There were 35 Internet and Digital Media deals with disclosed values during Q4, totaling \$5.1B. This value is significantly lower than the previous quarter of \$15.1B, however, still exceeds the quarterly amounts in 2013 for the sector. Similar to 2013, the majority of deals disclosed were under \$25M. The median deal value for Q4 was \$36.0M, on par with the historical 2011-2013 medians of \$38M, \$33M and \$27M, respectively. The historical median deal value (Q1 2009 – Q3 2014) for the segment is approximately 1.9x revenue and in Q4 the median deal value was 2.6x revenue.

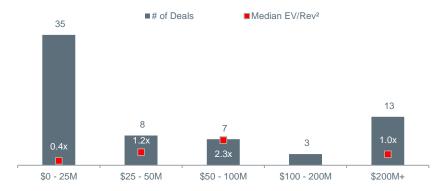






#### M&A Activity - Active Technology Segments (continued)1

**IT Services.** IT Services was the most active sector in Q4 with regards to deal volume, with 277 total transactions, 66 of which had disclosed values. The median deal value was \$20.3M, on par with the historical median (Q1 2009 – Q3 2014) of \$20.0M. The median revenue multiple was 0.8x revenue, which was also on par with the historical median (Q1 2009 – Q3 2014) of 0.9x revenue, and the lowest of the active sectors.



**Semiconductors.** After a relatively active Q3 2014, the Semiconductor sector remained robust in terms of deal value. There were 15 deal announcements with disclosed values totaling \$5.4B in Q4 2014. This was primarily due to a number of smaller transactions resulting in a median deal value of \$31.9M for the sector, nearly half the historical median (Q1 2009 – Q3 2014) of \$62.0M. The median valuation for the quarter was 1.6x, meaningfully lower than previous quarters, and approximately 13% lower than the historical median (Q1 2009 – Q3 2014) of 1.8x revenue.



**Software.** The Software segment was the second most active sector of Q4 2014, accounting for 27% of total technology deal volume and 13% of total deal value. The median revenue multiple for software deals was 2.5x, on par with the historical median (Q1 2009 – Q3 2014) of approximately 2.5x. There were 10 announced transactions valued at more than \$200M, representing 78% of the total disclosed deal values in the software sector for the quarter. The largest announced transaction was Centerbridge Partners \$1.2B acquisition of IPC Systems.

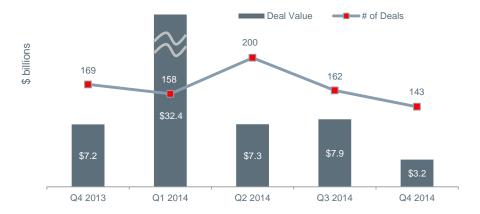




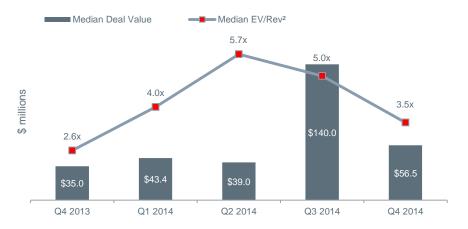


### M&A Overview – Venture-Backed Companies<sup>1</sup>

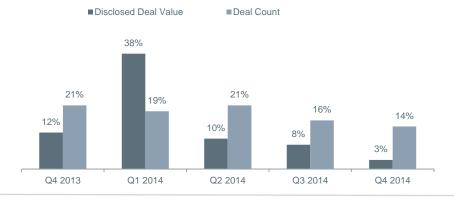
**M&A** Activity. Venture-backed M&A decreased significantly to \$3.2B compared to Q3's \$7.9B; deal volume also decreased meaningfully to 143 compared to 162 deals announced in Q3. In total, there were six \$200M+ transactions with the largest transaction being the \$640M acquisition of BrightRoll by Yahoo.



**Median Deal Value & Multiples.** Venture-backed M&A median deal value significantly decreased to \$56.5M during the quarter, however, was still meaningfully higher than the historical median (Q1 2009 – Q3 2014) of approximately \$48.7M. Median revenue multiples declined to 3.5x, which remains on par with the historical median (Q1 2009 – Q3 2014) of 3.6x.



Venture Exits – Percentage of Total M&A Activity by Count and Deal Value. Venture-backed M&A exits comprised 14% of total deal count, and 3% of total disclosed deal value. Deal count and deal value as a percent of total M&A have remained relatively stable over the past several quarters with the exception of Q1 2014 and Q4 2014 deal values.







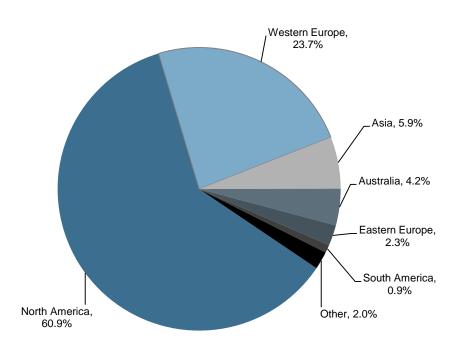
#### Private Equity Participation<sup>1</sup>

**Private Equity-Backed Technology M&A Overview.** Private equity-backed acquisitions totaled \$17.8B during the quarter, or 29% of aggregate technology M&A value, significantly higher than historical quarterly levels. Total volume of PE-backed transactions also significantly increased compared to 2013 and Q1-Q3 2014. Key deals of Q4 include Thoma Bravo's \$3.6B acquisition of Riverbed Technology and the NJJ Capital acquisition of Orange Communications for \$2.8B.



## M&A Geographic Distribution<sup>1</sup>

**Technology M&A Overview by Geography.** North America's share of technology M&A continued to decrease to 61% compared to 63% in Q3 2014 and 67% in Q4 2013. Other geographies remained relatively flat on a quarter to quarter basis.







Q4 2014 Notable Transactions'								
Acquirer	Target	Date	Segment	EV	EV/Rev <sup>2</sup>	EV/EBITDA <sup>5</sup>		
Citrix	RightSignature	10/20/2014	Electronic Signature SaaS	\$36M	5.1x	N/A		

Citrix Systems acquired RightSignature for \$37.5M (Implied EV: \$36M) in an all cash transaction on October 20, 2014. RightSignature provides web-based electronic signature capture, verification, fraud prevention, e-signed document management SaaS, and mobile e-signature applications. RightSignature partnered with Citrix last year to present a joint ShareFile/RightSignature solution, providing a simple way for Citrix's customers to go paperless by signing their documents electronically on desktop and mobile devices. As an extension of this partnership, Citrix believes the acquisition will help simplify document creation and streamline workflow processes for its customers. They are also now able to integrate RightSignature's global customer base of accounting, financial services, healthcare, and insurance professionals into their growing international operations. RightSignature was founded in 2009 and is based in Santa Barbara, CA.

Acquirer	Target	Date	Segment	EV	EV/Rev <sup>2</sup>	EV/EBITDA <sup>5</sup>
Intel	PasswordBox	12/01/14	Password Management SaaS	\$55M	N/A	N/A

Intel purchased PasswordBox for approximately \$55M on December 1, 2014. PasswordBox allows customers to manage and store passwords and automatically login to multiple accounts using its SaaS platform. PasswordBox is Intel's first security acquisition since McAfee in 2010. As part of the Intel Security Group (formerly McAfee), PasswordBox's solution is expected to further their commitment to improving digital identity protection across all devices and platforms. This acquisition also aligns well with Intel's cybersecurity initiatives as it works with Cyber Threat Alliance members Palo Alto Networks, Symantec, and Fortinet to protect sensitive data. PasswordBox previously raised investment from OMERS Ventures, Real Ventures, Townsgate Media, and a list of angel investors. The company was founded in 2012 and is based in Montréal, Canada.

Acquirer	Target	Date	Segment	EV	EV/Rev <sup>2</sup>	EV/EBITDA <sup>5</sup>
Vector Capital	ChyronHego	11/1714	Broadcast Graphics Design SaaS	\$112M	1.9x	N/A

On November 17, Vector Capital entered into a definitive merger agreement to acquire ChyronHego for ~\$112M in cash at \$2.82 per share with a seven week "go-shop" provision. This represents an 18% premium over the company's average closing share price for the past six months, and a 4% premium over the company's closing share price on November 14, 2014, the last day of trading before the announcement. ChyronHego creates broadcast graphics, digital asset management, play-out, and real-time data visualization SaaS solutions for live television, news, weather, and sports production. ChyronHego's solutions are used globally by thousands of broadcasters including ABC, FOX CBS, ESPN, Turner Entertainment Networks, The Golf Channel, Home Shopping Network, ITVNews, the BBC, SkySports, Korean Broadcasting, Germany's BR and NDR networks, plus local stations in every television market. The acquisition lends itself well to Vector's previous experience in taking public media technology companies private (20-20 and Corel) and partnering with management to restructure, improve, and grow operations within each respective vertical market. Approximately 50% of ChyronHego was insider owned and all of these major shareholders have agreed to re-invest ~50% of their holdings into the new private entity creating an alignment of interests between management and Vector Capital, according to the company statement. ChyronHego was founded in 1966 and is headquartered in Melville, NY.

Acquirer	Target	Date	Segment	EV	EV/Rev <sup>2</sup>	EV/EBITDA5
OpenText	Actuate	12/05/2014	BI Analytics Software	\$249M	2.3x	N/A

On December 5, OpenText entered into an agreement to acquire Actuate for \$307M in cash at \$6.60 per share (Implied EV: \$249M). This represented an ~89% premium to Actuate's closing price on December 4, 2014. Actuate is a global provider of open-source business intelligence analytics, reporting and data integration software enabling businesses to turn large volumes of data into insights about their customers using a single drag-and-drop interface. Actuate integrates with and broadens OpenText's information and big data management B2B solutions, providing a new layer of business intelligence tools allowing for cross-selling opportunities and synergistic growth. This follows OpenText's overall acquisition strategy of enhancing its SaaS capabilities and may provide technology to better compete with IBM, Perceptive, Microsoft, EMC, HP, Hyland, Xerox, and other competitors in the enterprise content management industry. Actuate was founded in 1993 and is based in San Mateo, CA.

Systems

<sup>1.</sup> Limited to transactions with disclosed values as of 09/30/14; variances due to rounding; sources used throughout the report include The 451 Group, Capital IQ, Company Filings and other Wall Street Research. 2. EV/Rev = Enterprise Value / Revenue 3. Y/Y = Year on Year 4. Q/Q = Quarter on Quarter

<sup>5.</sup> EBITDA – earnings before interest, taxes, depreciation, and amortization

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