

SAAS INDUSTRY UPDATE | Q3 2018



NOTABLE & QUOTABLE

“Pricing has emerged as one of the most important and impactful levers that SaaS companies have to accelerate growth. It is one of maybe a handful of initiatives that results in 25% faster growth without needing to hire more sales reps or spend more on marketing. When’s the last time you had a strategic, board-level conversation about pricing?” – Kyle Poyar, Senior Director of Market Strategy, OpenView

“Build something you’re passionate about. That is the fuel that gets you through all the hard things you have to do as an entrepreneur and you have to do as a CEO. If you feel like at the end of the day you’re building something that’s meaningful, something the world needs and something that you feel passionate about bringing into existence into the world, that’s the fuel that helps you do everything that you do as an entrepreneur.” – Jeff Lawson, Twilio CEO

“Predicting intent, scoring lead quality and account-specific messaging are all examples of data-driven processes that are now the norm in the B2B world.” – Vamshi Mokshagundam, Siftory CEO

GROWTH

For SaaS companies, revenue growth is critical for operational and financial success. Kieran Flanagan, VP of Marketing and Growth at HubSpot, has [outlined](#) key ingredients to develop and run a growth-oriented team. Attracting candidates should be thought of within a similar framework of attracting customers to a product, and technical skills should not be over emphasized when the right candidate is coachable.

M&A TIMING

Perspectives from fellow entrepreneurs are often most valuable when considering timing, expectations and challenges associated with an exit or recapitalization. EdTech has undergone exceptional growth and consolidation among SaaS verticals over the past 10 years. Recently, EdSurge detailed in [this article](#) what experiencing a transaction process can be like in a founder-owned company through interviews with three EdTech founders that went on to sell their companies. Common among all three is the sentiment that companies are not sold, they are bought.

CHURN

While customer acquisition is the driver of growth, churn impairs growth and efficiency, potentially raising concerns for working capital sustainability. In [this article](#), Justin Talerico at SaaSX breaks down why churn must be monitored and assessed against working capital needs. Acquiring customers can be costly, so retaining them is essential to realizing value in SaaS companies of all sizes.

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Upcoming Events

[SaaStr](#)

February 5th – 7th, 2019

San Jose Convention Center

[Let Us Know if You’re Attending!](#)

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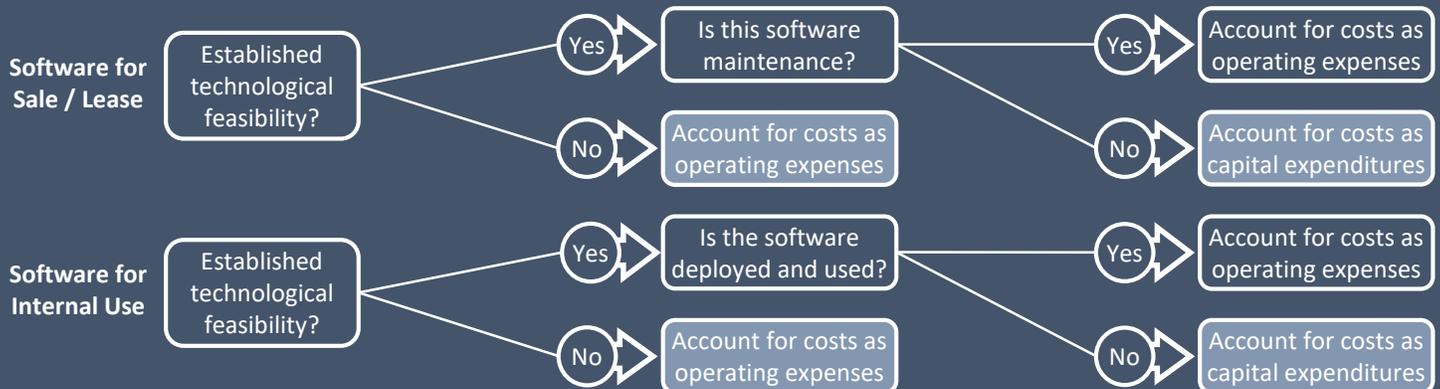
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Quarterly Tip: Accounting for Software Development Costs



Having a firm understanding and consistent application of accounting principles is critical to substantiating operational and financial performance to investors, particularly when subjective judgement is involved. An area of accounting that is persistently subjective and challenging for high-growth SaaS companies is the capitalization of software development costs. In our quarterly tip, we have outlined considerations for when and why SaaS companies may choose to account for software development costs as an operating expense or capital expenditure.

Financial Accounting – What's on the Books



Software development expenses are categorized by what stage of the development process they were incurred. Generally, planning and testing costs necessary to establish that the product can be produced to meet its design specifications or maintenance costs incurred after the product is available to its end users are considered operating expenses. Development costs incurred between technological feasibility being established and market release are considered capital expenditures. Any software development costs incurred after the software is available for sale for improvement beyond the original offering are capitalized according to the same timeline as an entirely new product, but routine maintenance and alterations costs are considered operating expenses according to GAAP. GAAP-based cost accounting for software development can be particularly cumbersome in agile development environments due to the more rapid change, iteration and feature-by-feature processes; small windows of opportunity for capitalization present themselves during agile development.

Tax Accounting – What You Pay ⁽¹⁾

While financial statements are reported according to GAAP, tax liability is calculated according to various IRS rules. On a high-level, the IRS outlines 2 tax treatments for software development: accounting for all software development costs as current, deductible expenses and accounting for software development costs as capital expenditures to be amortized over 5 years from the date of completion or 3 years from the date the software is placed into service. Software development costs are clarified in detail through IRS Letter Ruling 200236028, CCA 201549024 and Rev. Proc. 2000-50. The default method is generally to deduct costs of Research and Development under Sec. 174 to lower the current tax liability; however, for all tax years following 2021, software development expenses must be capitalized with a 5-year useful life or 15-year useful life for costs outside of the U.S.

Investor View – What It's Worth

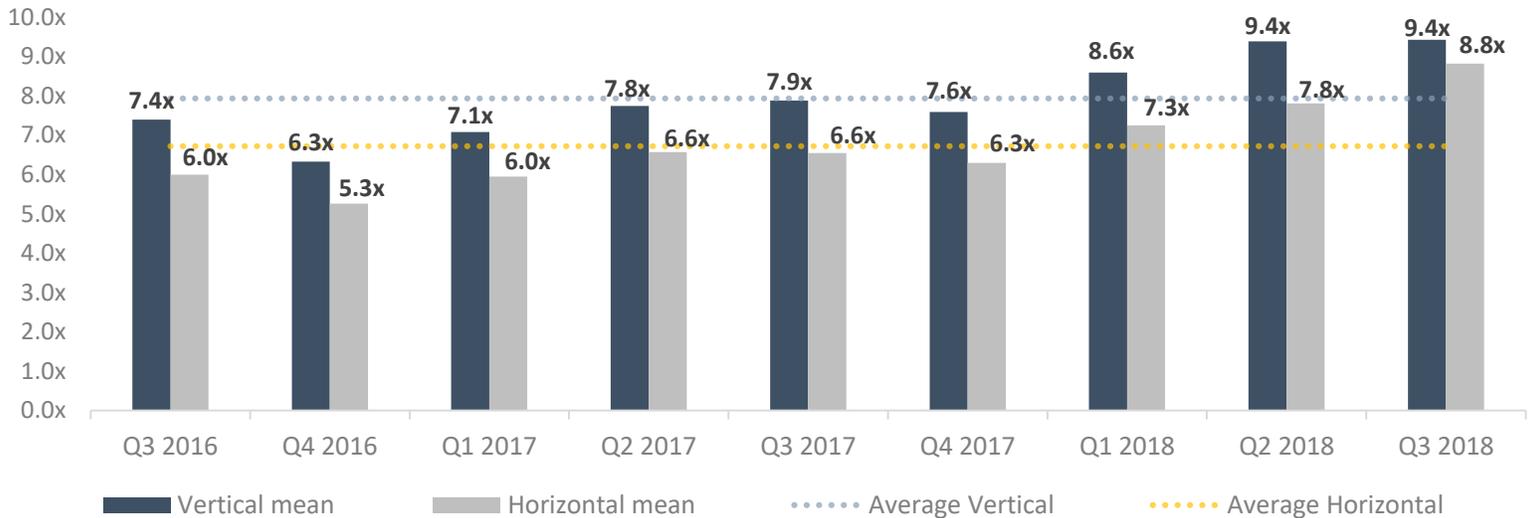
Shareholders and potential investors will primarily examine software development costs as they relate to their expectations of future cash flows and risk; however, the sole change in cash flows that can be manipulated through changes in software development capitalization is a company's tax liability, which represents small marginal dollar value change. Software development is often capitalized inconsistently, which can overcomplicate financial data analysis and projections for investors. Many investors have different views on the treatment of software development costs. However, when choosing to capitalize software development costs, most investors will prefer that the costs be accounted for consistently and that methodologies be documented thoroughly.

Recent Transactions

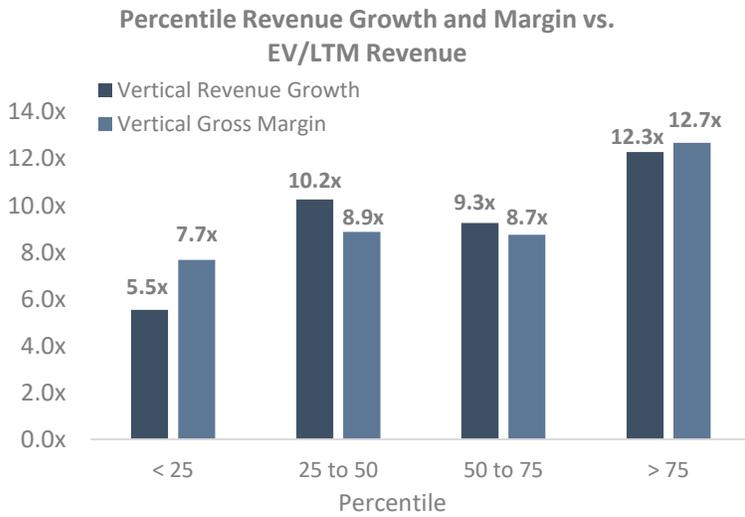
Announced Date	Target	Buyer	Purchase Price	LTM Revenue	LTM EBITDA	Enterprise Value / LTM Revenue	Enterprise Value / LTM EBITDA
7/2/2018	 acxiom	 IPG	\$2,300	-	N/A	N/A	N/A
7/9/2018	 LifelWorks	 MORNEAU SHEPELL	\$326	\$84	N/A	3.9x	N/A
7/11/2018	 ca technologies	 BROADCOM	\$18,448	\$4,148	\$1,254	4.4x	14.7x
7/16/2018	 datorama	 salesforce	\$758	-	N/A	N/A	N/A
7/17/2018	 C-R-F HEALTH	 Bracket	\$1,000	N/A	N/A	N/A	N/A
7/31/2018	 EZE SOFTWARE	 SS&C	\$1,450	\$280	\$105	5.2x	13.8x
7/31/2018	 accruent	 FORTIVE	\$2,000	-	N/A	N/A	N/A
8/2/2018	 DUO	 CISCO	\$2,350	-	N/A	N/A	N/A
8/10/2018	 TravelClick	 amadeus	\$1,520	\$373	\$86	4.1x	17.7x
8/27/2018	 INFOARMOR	 Allstate	\$525	-	N/A	N/A	N/A
9/6/2018	 epi	 INSIGHT VENTURE PARTNERS	\$1,160	-	N/A	N/A	N/A
9/6/2018	 INTRA LINKS	 SS&C	\$1,500	\$325	\$132	4.6x	11.4x
9/12/2018	 CITYBASE	 GTY TECHNOLOGY	\$160	-	N/A	N/A	N/A
9/20/2018	 Marketo	 Adobe	\$4,750	-	N/A	N/A	N/A

METRICS OVERVIEW

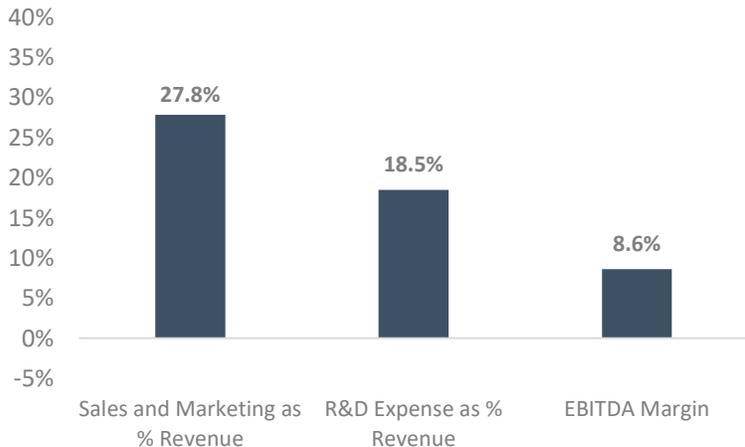
Public Vertical & Horizontal EV/LTM Revenue Multiples



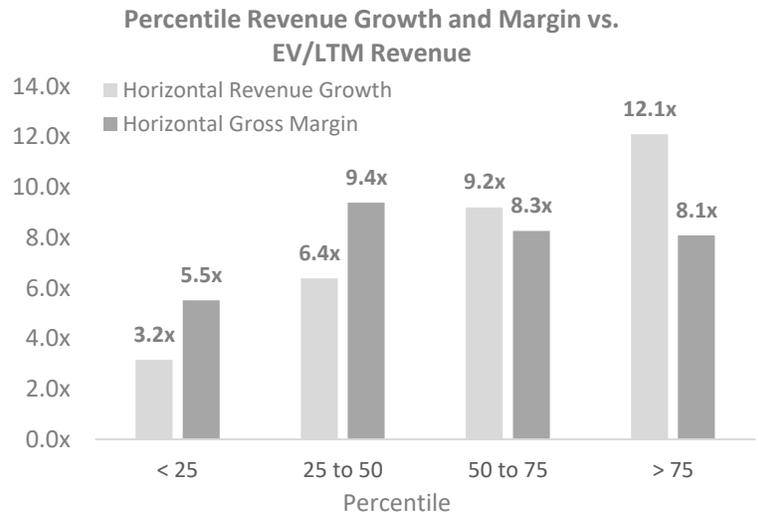
Public Vertical



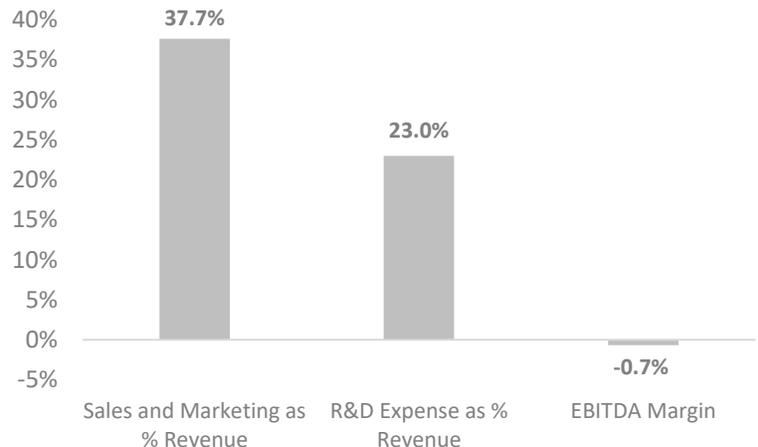
Average Operating Metrics



Public Horizontal



Average Operating Metrics



VALUATION & GROWTH METRICS

FA SaaS Index - Valuation & Growth - As of Q3 2018

(In millions)

Ticker	Company Name	LTM Revenue	YoY Growth	LTM EBITDA	YoY Growth*	Enterprise Value / LTM Revenue	LTM EBITDA
Vertical SaaS Companies							
TWOU	2U, Inc.	\$ 383.4	48.9%	\$ (20.1)	(85.9%)	11.1x	NM
APPF	AppFolio, Inc.	\$ 177.6	32.6%	\$ 24.3	157.7%	15.9x	124.5x
ATHN	athenahealth, Inc.	\$ 1,311.4	11.2%	\$ 264.8	122.9%	4.2x	22.5x
BLKB	Blackbaud, Inc.	\$ 844.6	9.8%	\$ 137.0	(4.0%)	6.3x	37.0x
EBIX	Ebix, Inc.	\$ 466.2	37.4%	\$ 154.5	29.9%	7.0x	21.0x
ELLI	Ellie Mae, Inc.	\$ 477.1	19.2%	\$ 67.9	(17.1%)	6.6x	44.7x
INST	Instructure, Inc.	\$ 195.9	32.6%	\$ (48.4)	(14.0%)	6.1x	NM
MDSO	Medidata Solutions, Inc.	\$ 611.4	16.0%	\$ 89.4	9.1%	7.4x	47.9x
MB	MINDBODY, Inc.	\$ 228.9	33.8%	\$ (19.0)	(179.6%)	8.8x	NM
NEWR	New Relic, Inc.	\$ 413.4	35.0%	\$ (5.7)	87.7%	13.0x	NM
QTWO	Q2 Holdings, Inc.	\$ 225.6	22.3%	\$ (12.0)	19.4%	11.6x	NM
RP	RealPage, Inc.	\$ 830.2	31.3%	\$ 141.4	92.2%	8.0x	47.5x
SPSC	SPS Commerce, Inc.	\$ 241.6	13.4%	\$ 29.7	24.0%	6.7x	63.2x
VEEV	Veeva Systems Inc.	\$ 763.2	23.0%	\$ 185.0	17.6%	19.3x	79.6x

Min	\$ 177.6	9.8%	\$ (48.4)	(179.6%)	4.2x	21.0x
Median	\$ 439.8	27.1%	\$ 48.8	18.5%	7.7x	47.5x
Mean	\$ 512.2	26.2%	\$ 70.6	18.6%	9.4x	54.2x
Max	\$ 1,311.4	48.9%	\$ 264.8	157.7%	19.3x	124.5x

Horizontal SaaS Companies

EGHT	8x8, Inc.	\$ 323.8	19.2%	\$ (47.1)	(1232.3%)	5.9x	NM
ALRM	Alarm.com Holdings, Inc.	\$ 397.9	24.4%	\$ 75.9	31.4%	7.2x	37.5x
AMBR	Amber Road, Inc.	\$ 83.9	8.1%	\$ (8.3)	13.0%	3.4x	NM
APTI	Apptio, Inc.	\$ 224.7	24.5%	\$ (14.0)	29.2%	7.1x	NM
TEAM	Atlassian Corporation Plc	\$ 945.8	39.4%	\$ 21.4	197.9%	24.9x	NM
BNFT	Benefitfocus, Inc.	\$ 271.7	17.3%	\$ 3.0	110.8%	5.1x	NM
BL	BlackLine, Inc.	\$ 216.9	34.8%	\$ (10.4)	31.7%	14.4x	NM
BOX	Box, Inc.	\$ 554.7	22.5%	\$ (104.1)	11.5%	5.9x	NM
BCOV	Brightcove Inc.	\$ 164.1	6.2%	\$ (7.0)	51.4%	1.7x	NM
CARB	Carbonite, Inc.	\$ 281.1	21.6%	\$ 35.9	780.3%	5.0x	49.1x
CSLT	Castlight Health, Inc.	\$ 150.9	21.0%	\$ (34.0)	34.3%	2.1x	NM
ECOM	ChannelAdvisor Corporation	\$ 130.5	8.6%	\$ (2.2)	65.7%	2.3x	NM
CTXS	Citrix Systems, Inc.	\$ 2,949.9	6.1%	\$ 912.5	18.6%	5.4x	17.6x
CSOD	Cornerstone OnDemand, Inc.	\$ 531.6	15.8%	\$ 0.6	101.5%	6.2x	NM
COUP	Coupa Software Incorporated	\$ 219.1	37.7%	\$ (37.5)	(10.2%)	19.7x	NM
EVBG	Everbridge, Inc.	\$ 134.4	39.4%	\$ (33.2)	(172.0%)	13.7x	NM
FIVN	Five9, Inc.	\$ 240.7	27.4%	\$ 10.8	102.1%	11.0x	230.0x
HUBS	HubSpot, Inc.	\$ 475.5	37.6%	\$ (37.2)	(3.6%)	12.7x	NM
KXS	Kinaxis Inc.	\$ 146.9	13.7%	\$ 30.7	18.7%	12.2x	52.4x
LPSN	LivePerson, Inc.	\$ 241.5	11.0%	\$ 4.6	(60.2%)	6.6x	182.8x
LOGM	LogMeIn, Inc.	\$ 1,169.8	45.9%	\$ 343.3	60.9%	4.1x	13.6x
MRIN	Marin Software Incorporated	\$ 60.5	(24.6%)	\$ (25.1)	(57.3%)	0.1x	NM
MIME	Mimecast Limited	\$ 301.2	35.7%	\$ 19.5	141.1%	8.6x	148.8x
MOBL	MobileIron, Inc.	\$ 184.9	4.9%	\$ (41.1)	18.3%	2.5x	NM

VALUATION & GROWTH METRICS, CONT'D

Ticker	Company Name	LTM Revenue	YoY Growth	LTM EBITDA	YoY Growth*	Enterprise Value / LTM Revenue	LTM EBITDA
Horizontal SaaS Companies							
MODN	Model N, Inc.	\$ 154.6	17.9%	\$ (12.5)	55.8%	3.2x	NM
PAYC	Paycom Software, Inc.	\$ 530.0	30.3%	\$ 135.0	12.3%	18.3x	77.3x
PCTY	Paylocity Holding Corporation	\$ 396.5	25.3%	\$ 36.0	59.4%	10.9x	128.1x
PEGA	Pegasystems Inc.	\$ 841.9	1.0%	\$ (23.8)	(126.0%)	5.6x	NM
PFPT	Proofpoint, Inc.	\$ 661.0	37.8%	\$ (38.9)	(6.5%)	9.3x	NM
QLYS	Qualys, Inc.	\$ 267.6	21.6%	\$ 75.8	33.5%	12.3x	47.1x
RNG	RingCentral, Inc.	\$ 624.1	33.7%	\$ (12.0)	(391.8%)	12.4x	NM
CRM	salesforce.com, inc.	\$ 11,793.0	25.3%	\$ 1,199.7	89.3%	10.3x	101.1x
SCWX	SecureWorks Corp.	\$ 492.9	8.1%	\$ (37.9)	(78.9%)	2.2x	NM
NOW	ServiceNow, Inc.	\$ 2,457.0	40.0%	\$ 59.8	205.7%	14.9x	NM
SHOP	Shopify Inc.	\$ 952.2	63.9%	\$ (66.4)	(85.2%)	18.7x	NM
ULTI	The Ultimate Software Group, Inc.	\$ 1,087.2	20.8%	\$ 116.3	68.0%	9.5x	92.2x
UPLD	Upland Software, Inc.	\$ 132.6	48.1%	\$ 28.7	135.2%	6.9x	32.8x
VRNS	Varonis Systems, Inc.	\$ 257.7	31.0%	\$ (22.2)	(58.6%)	8.1x	NM
WIX	Wix.com Ltd.	\$ 558.1	42.6%	\$ (25.7)	28.0%	10.6x	NM
WDAY	Workday, Inc.	\$ 2,428.2	30.7%	\$ (169.1)	18.8%	12.3x	NM
WK	Workiva Inc.	\$ 234.4	17.4%	\$ (41.5)	(23.7%)	7.3x	NM
ZEN	Zendesk, Inc.	\$ 548.7	38.3%	\$ (106.4)	(31.6%)	14.4x	NM
ZIXI	Zix Corporation	\$ 68.8	6.8%	\$ 14.3	0.5%	4.2x	20.7x
Min		\$ 60.5	(24.6%)	\$ (169.1)	(1232.3%)	0.1x	13.6x
Median		\$ 301.2	24.4%	\$ (8.3)	18.8%	7.3x	52.4x
Mean		\$ 811.4	24.2%	\$ 50.4	4.4%	8.8x	82.1x
Max		\$ 11,793.0	63.9%	\$ 1,199.7	780.3%	24.9x	230.0x

* Figures in grey text indicate that a) the year over year growth rate reflects a reduction in deficit from previous year or b) the year over year growth rate reflects growth from a deficit in previous year to positive EBITDA this year

OPERATING STATISTICS

FA SaaS Index - Operating Statistics - As of Q3 2018

Ticker	Company Name	COGS As a % of Revenue	Gross Margin	SG&A As a % of Revenue	R&D Expense As a % of Revenue	Sales & Marketing As a % of Revenue	EBITDA Margin
Vertical SaaS Companies							
TWOU	2U, Inc.	21.9%	78.1%	75.9%	15.2%	54.7%	(5.3%)
APPF	AppFolio, Inc.	37.8%	62.2%	30.2%	18.4%	17.4%	13.7%
ATHN	athenahealth, Inc.	45.7%	54.3%	25.8%	14.8%	15.4%	20.2%
BLKB	Blackbaud, Inc.	45.0%	55.0%	34.5%	13.1%	22.5%	16.2%
EBIX	Ebix, Inc.	35.3%	64.7%	23.7%	8.4%	3.8%	33.2%
ELLI	Ellie Mae, Inc.	41.7%	58.3%	37.0%	18.4%	17.0%	14.2%
INST	Instructure, Inc.	29.6%	70.4%	68.9%	32.0%	50.7%	(24.7%)
MDSO	Medidata Solutions, Inc.	24.3%	75.7%	40.9%	25.4%	23.9%	14.6%
MB	MINDBODY, Inc.	30.2%	69.8%	59.0%	25.4%	38.6%	(8.3%)
NEWR	New Relic, Inc.	16.3%	83.7%	69.2%	21.8%	54.4%	(1.4%)
QTWO	Q2 Holdings, Inc.	50.1%	49.9%	38.9%	21.0%	19.9%	(5.3%)
RP	RealPage, Inc.	39.1%	60.9%	35.5%	16.5%	22.2%	17.0%
SPSC	SPS Commerce, Inc.	33.1%	66.9%	49.0%	9.0%	30.8%	12.3%
VEEV	Veeva Systems Inc.	30.3%	69.7%	28.0%	19.4%	18.5%	24.2%
	Min	16.3%	49.9%	23.7%	8.4%	3.8%	(24.7%)
	Median	34.2%	65.8%	37.9%	18.4%	22.4%	14.0%
	Mean	34.3%	65.7%	44.0%	18.5%	27.8%	8.6%
	Max	50.1%	83.7%	75.9%	32.0%	54.7%	33.2%

Horizontal SaaS Companies

EGHT	8x8, Inc.	24.5%	75.5%	80.1%	14.1%	65.2%	(14.5%)
ALRM	Alarm.com Holdings, Inc.	33.9%	66.1%	24.4%	21.8%	12.7%	19.1%
AMBR	Amber Road, Inc.	45.5%	54.5%	50.6%	19.9%	27.3%	(9.9%)
APTI	Apptio, Inc.	30.9%	69.1%	57.4%	21.4%	43.7%	(6.2%)
TEAM	Atlassian Corporation Plc	18.8%	81.2%	37.7%	49.3%	20.6%	2.3%
BNFT	Benefitfocus, Inc.	45.9%	54.1%	40.1%	18.7%	26.8%	1.1%
BL	BlackLine, Inc.	22.1%	77.9%	78.6%	17.3%	57.6%	(4.8%)
BOX	Box, Inc.	27.3%	72.7%	72.5%	26.9%	56.5%	(18.8%)
BCOV	Brightcove Inc.	40.5%	59.5%	47.6%	20.3%	33.8%	(4.3%)
CARB	Carbonite, Inc.	26.6%	73.4%	47.6%	19.8%	30.2%	12.8%
CSLT	Castlight Health, Inc.	39.3%	60.7%	46.7%	42.3%	36.0%	(22.5%)
ECOM	ChannelAdvisor Corporation	19.7%	80.3%	69.0%	17.3%	49.2%	(1.7%)
CTXS	Citrix Systems, Inc.	13.1%	86.9%	45.2%	15.9%	35.3%	30.9%
CSOD	Cornerstone OnDemand, Inc.	27.7%	72.3%	60.1%	17.2%	43.8%	0.1%
COUP	Coupa Software Incorporated	31.1%	68.9%	64.6%	25.0%	43.6%	(17.1%)
EVBG	Everbridge, Inc.	31.3%	68.7%	70.6%	32.3%	48.1%	(24.7%)
FIVN	Five9, Inc.	40.7%	59.3%	45.5%	13.5%	29.3%	4.5%
HUBS	HubSpot, Inc.	19.8%	80.2%	68.0%	24.5%	53.4%	(7.8%)
KXS	Kinaxis Inc.	30.2%	69.8%	34.8%	19.2%	22.2%	20.9%
LPSN	LivePerson, Inc.	25.0%	75.0%	57.7%	21.5%	41.6%	1.9%
LOGM	LogMeIn, Inc.	22.5%	77.5%	44.2%	16.1%	30.3%	29.3%
MRIN	Marin Software Incorporated	47.2%	52.8%	65.1%	45.3%	41.5%	(41.4%)
MIME	Mimecast Limited	26.8%	73.2%	58.3%	16.4%	44.0%	6.5%
MOBL	MobileIron, Inc.	17.1%	82.9%	65.6%	41.9%	50.6%	(22.2%)

OPERATING STATISTICS, CONT'D

Ticker	Company Name	COGS <i>As a % of Revenue</i>	Gross Margin	SG&A <i>As a % of Revenue</i>	R&D Expense <i>As a % of Revenue</i>	Sales & Marketing <i>As a % of Revenue</i>	EBITDA Margin
Horizontal SaaS Companies							
MODN	Model N, Inc.	42.3%	57.7%	50.2%	21.0%	22.9%	(8.1%)
PAYC	Paycom Software, Inc.	13.7%	86.3%	51.7%	7.7%	32.3%	25.5%
PCTY	Paylocity Holding Corporation	37.9%	62.1%	47.1%	13.7%	25.4%	9.1%
PEGA	Pegasystems Inc.	35.4%	64.6%	49.4%	21.0%	43.1%	(2.8%)
PFPT	Proofpoint, Inc.	28.6%	71.4%	61.3%	26.1%	49.8%	(5.9%)
QLYS	Qualys, Inc.	23.6%	76.4%	39.5%	18.6%	24.6%	28.3%
RNG	RingCentral, Inc.	23.5%	76.5%	66.8%	15.1%	52.1%	(1.9%)
CRM	salesforce.com, inc.	26.0%	74.0%	55.7%	15.1%	45.8%	10.2%
SCWX	SecureWorks Corp.	48.7%	51.3%	50.1%	17.4%	30.6%	(7.7%)
NOW	ServiceNow, Inc.	24.0%	76.0%	59.5%	19.8%	48.3%	2.4%
SHOP	Shopify Inc.	44.2%	55.8%	43.3%	21.7%	33.6%	(7.0%)
ULTI	The Ultimate Software Group, Inc.	37.7%	62.3%	37.4%	18.1%	25.6%	10.7%
UPLD	Upland Software, Inc.	32.5%	67.5%	36.2%	14.9%	14.1%	21.6%
VRNS	Varonis Systems, Inc.	10.0%	90.0%	74.8%	24.9%	62.5%	(8.6%)
WIX	Wix.com Ltd.	19.7%	80.3%	53.0%	33.7%	42.8%	(4.6%)
WDAY	Workday, Inc.	29.4%	70.6%	40.7%	43.2%	30.9%	(7.0%)
WK	Workiva Inc.	27.5%	72.5%	57.8%	34.0%	38.1%	(17.7%)
ZEN	Zendesk, Inc.	30.1%	69.9%	67.9%	28.0%	50.7%	(19.4%)
ZIXI	Zix Corporation	21.0%	79.0%	46.2%	16.9%	2.2%	20.7%
	Min	10.0%	51.3%	24.4%	7.7%	2.2%	(41.4%)
	Median	27.7%	72.3%	51.7%	19.9%	38.1%	(2.8%)
	Mean	29.4%	70.6%	54.0%	23.0%	37.7%	(0.7%)
	Max	48.7%	90.0%	80.1%	49.3%	65.2%	30.9%

BALANCE SHEET METRICS

FA SaaS Index - Balance Sheet Metrics - As of Q3 2018

Ticker	Company Name	Return on Assets	Return on Equity	Current Ratio	Days Sales Outstanding	Days Payable Outstanding	Liabilities/Assets	Debt/Equity
Vertical SaaS Companies								
TWOU	2U, Inc.	(4.8%)	(8.0%)	6.3x	43.8	71.2	14.7%	3.5%
APPF	AppFolio, Inc.	10.7%	21.0%	3.0x	9.2	6.2	20.4%	N/A
ATHN	athenahealth, Inc.	8.1%	13.8%	2.7x	57.2	4.1	32.8%	24.2%
BLKB	Blackbaud, Inc.	3.5%	20.1%	0.7x	42.5	20.8	74.1%	116.9%
EBIX	Ebix, Inc.	7.3%	21.5%	1.6x	101.0	177.8	62.1%	120.4%
ELLI	Ellie Mae, Inc.	1.0%	4.2%	5.2x	39.0	28.0	10.8%	N/A
INST	Instructure, Inc.	(15.7%)	(91.0%)	1.5x	77.3	68.1	58.3%	N/A
MDSO	Medidata Solutions, Inc.	4.0%	9.7%	2.5x	80.3	11.1	31.6%	15.9%
MB	MINDBODY, Inc.	(4.8%)	(14.7%)	9.4x	18.2	49.6	50.8%	88.8%
NEWR	New Relic, Inc.	(2.3%)	(11.1%)	3.8x	51.0	41.7	66.5%	123.2%
QTWO	Q2 Holdings, Inc.	(4.5%)	(22.1%)	5.6x	31.8	23.0	63.2%	112.6%
RP	RealPage, Inc.	2.6%	1.0%	0.8x	47.4	30.8	47.2%	55.5%
SPSC	SPS Commerce, Inc.	3.0%	2.4%	5.2x	38.9	15.8	15.7%	N/A
VEEV	Veeva Systems Inc.	8.9%	17.7%	3.9x	53.5	11.0	23.0%	N/A
Min		(15.7%)	(91.0%)	0.7x	9.2	4.1	10.8%	3.5%
Median		2.8%	3.3%	3.4x	45.6	25.5	40.0%	88.8%
Mean		1.2%	(2.5%)	3.7x	49.4	40.0	40.8%	73.5%
Max		10.7%	21.5%	9.4x	101.0	177.8	74.1%	123.2%

Horizontal SaaS Companies

EGHT	8x8, Inc.	(11.3%)	(50.7%)	2.6x	20.2	109.8	22.7%	N/A
ALRM	Alarm.com Holdings, Inc.	9.6%	5.6%	2.9x	44.3	56.5	38.1%	25.7%
AMBR	Amber Road, Inc.	(7.4%)	(46.2%)	0.6x	65.6	14.8	69.8%	73.4%
APTI	Apptio, Inc.	(4.1%)	(21.9%)	2.3x	91.5	32.8	63.0%	70.1%
TEAM	Atlassian Corporation Plc	(1.1%)	(42.7%)	4.2x	17.0	35.9	72.1%	116.1%
BNFT	Benefitfocus, Inc.	(3.3%)	N/A	0.9x	44.2	12.1	120.3%	N/A
BL	BlackLine, Inc.	(4.1%)	(9.5%)	1.4x	91.4	22.2	32.1%	N/A
BOX	Box, Inc.	(18.2%)	(390.2%)	1.0x	73.3	32.3	93.6%	265.1%
BCOV	Brightcove Inc.	(5.8%)	(18.6%)	1.1x	56.0	32.1	46.2%	0.2%
CARB	Carbonite, Inc.	0.9%	3.7%	0.9x	36.3	32.9	57.2%	47.4%
CSLT	Castlight Health, Inc.	(9.4%)	(25.1%)	1.9x	68.0	27.2	24.7%	2.9%
ECOM	ChannelAdvisor Corporation	(3.9%)	(10.5%)	1.9x	60.1	38.3	35.3%	1.6%
CTXS	Citrix Systems, Inc.	8.6%	9.2%	0.8x	54.3	59.4	86.1%	286.4%
CSOD	Cornerstone OnDemand, Inc.	(0.3%)	(89.7%)	1.6x	76.2	33.8	92.2%	529.1%
COUP	Coupa Software Incorporated	(5.7%)	(22.0%)	1.5x	72.1	11.6	57.7%	66.7%
EVBG	Everbridge, Inc.	(12.7%)	(91.6%)	1.5x	80.5	32.0	81.3%	195.6%
FIVN	Five9, Inc.	0.3%	(5.5%)	6.9x	31.7	17.3	66.0%	161.7%
HUBS	HubSpot, Inc.	(4.2%)	(29.2%)	3.2x	42.9	26.3	70.8%	136.7%
KXS	Kinaxis Inc.	6.7%	11.5%	3.1x	73.7	31.9	33.9%	7.1%
LPSN	LivePerson, Inc.	(3.0%)	(14.5%)	1.3x	63.4	30.3	39.9%	N/A
LOGM	LogMeIn, Inc.	1.2%	4.7%	0.6x	26.9	51.2	24.3%	6.6%
MRIN	Marin Software Incorporated	(28.3%)	(92.5%)	2.3x	64.5	28.8	35.6%	6.9%
MIME	Mimecast Limited	(0.7%)	(12.5%)	1.3x	64.1	31.2	71.7%	122.5%
MOBL	MobileIron, Inc.	(16.2%)	(112.8%)	1.6x	96.3	24.5	70.0%	N/A

BALANCE SHEET METRICS, CONT'D

Ticker	Company Name	Return on Assets	Return on Equity	Current Ratio	Days Sales Outstanding	Days Payable Outstanding	Liabilities/Assets	Debt/Equity
Horizontal SaaS Companies								
MODN	Model N, Inc.	(7.7%)	(69.4%)	1.2x	62.6	13.0	75.9%	134.1%
PAYC	Paycom Software, Inc.	5.7%	37.8%	1.1x	1.3	21.8	75.5%	9.7%
PCTY	Paylocity Holding Corporation	0.9%	25.1%	1.1x	2.6	6.6	84.1%	N/A
PEGA	Pegasystems Inc.	(3.7%)	(6.2%)	2.1x	108.5	15.6	35.5%	N/A
PFPT	Proofpoint, Inc.	(6.6%)	(38.6%)	0.7x	65.0	23.7	55.7%	0.0%
QLYS	Qualys, Inc.	5.6%	13.0%	2.2x	71.6	17.7	36.2%	N/A
RNG	RingCentral, Inc.	(3.7%)	(18.5%)	4.1x	36.5	19.9	64.4%	122.0%
CRM	salesforce.com, inc.	1.4%	6.6%	0.8x	54.9	20.8	47.6%	32.5%
SCWX	SecureWorks Corp.	(5.0%)	(4.1%)	1.2x	94.5	34.4	30.7%	0.2%
NOW	ServiceNow, Inc.	(1.5%)	(10.6%)	1.3x	53.2	19.8	71.5%	79.8%
SHOP	Shopify Inc.	(3.8%)	(5.0%)	11.8x	6.8	75.1	9.2%	N/A
ULTI	The Ultimate Software Group,	3.3%	7.4%	1.0x	66.3	11.1	55.4%	2.0%
UPLD	Upland Software, Inc.	2.2%	(17.8%)	0.6x	62.7	34.4	72.8%	177.3%
VRNS	Varonis Systems, Inc.	(7.5%)	(28.5%)	1.9x	69.1	32.0	55.2%	N/A
WIX	Wix.com Ltd.	(4.0%)	(54.8%)	2.2x	8.5	135.0	83.5%	249.0%
WDAY	Workday, Inc.	(4.9%)	(21.3%)	1.9x	62.2	18.7	62.7%	66.3%
WK	Workiva Inc.	(15.9%)	N/A	0.9x	50.6	19.5	106.1%	N/A
ZEN	Zendesk, Inc.	(9.6%)	(36.9%)	1.8x	44.7	44.7	66.4%	111.7%
ZIXI	Zix Corporation	7.3%	(12.3%)	0.8x	11.8	18.5	45.0%	N/A
Min		(28.3%)	(390.2%)	0.6x	1.3	6.6	9.2%	0.0%
Median		(3.8%)	(17.8%)	1.5x	62.2	28.8	62.7%	70.1%
Mean		(3.7%)	(31.3%)	2.0x	54.6	32.7	59.0%	100.2%
Max		9.6%	37.8%	11.8x	108.5	135.0	120.3%	529.1%

FOUNDERS SAAS INDEX KEY

FA SaaS Index - Key

Ticker	Company Name	Vertical/Business Description	Website
Vertical SaaS Companies			
TWOU	2U, Inc.	Higher Education: Learning management system for colleges and universities	https://www.2u.com
APPF	AppFolio, Inc.	Real Estate and Legal: Property management solution for real estate industry; practice and case management solution for the legal industry	https://www.appfolioinc.com
ATHN	athenahealth, Inc.	Healthcare: Revenue cycle management, practice management and electronic health record management	https://www.athenahealth.com
BLKB	Blackbaud, Inc.	Cloud software solutions for nonprofits and other charitable giving entities in the United States, Canada, Europe, and Australia	https://www.blackbaud.com/
EBIX	Ebix, Inc.	Insurance: End-to-end solutions ranging from infrastructure exchanges, carrier systems, agency systems and risk compliance solutions to custom software development	https://www.ebix.com
ELLI	Ellie Mae, Inc.	Residential Mortgage: Loan origination and enterprise management software	https://www.elliemae.com
INST	Instructure, Inc.	Higher Education: Learning management platform for academic institutions and corporations	https://www.instructure.com
MDSO	Medidata Solutions, Inc.	Life Sciences: Data analytics platform for clinical research	https://www.mdsol.com
MB	MINDBODY, Inc.	Wellness: Business management software for small and medium sized businesses in the wellness industry	https://www.mindbodyonline.com
NEWR	New Relic, Inc.	Software: Analytics platform to monitor software performance	https://www.newrelic.com
QTWO	Q2 Holdings, Inc.	Financial: Virtual banking solutions for regional and community banks and credit unions	https://www.q2banking.com
RP	RealPage, Inc.	Rental Housing: Property management solutions	https://www.realpage.com
SPSC	SPS Commerce, Inc.	Consumer Packaged Goods/Retail/Distribution: Supply chain management solutions	https://www.spscommerce.com
VEEV	Veeva Systems Inc.	Life Sciences: Content management, CRM, customer master and customer data platforms	https://www.veeva.com
Horizontal SaaS Companies			
EGHT	8x8, Inc.	Communications suite that provides call center solutions, business phone services, collaboration and virtual meetings	https://www.8x8.com
ALRM	Alarm.com Holdings, Inc.	Security, video monitoring, home automation, and energy management solutions for consumers and businesses	https://www.alarm.com
AMBR	Amber Road, Inc.	Global trade management (GTM) solutions	https://www.amberroad.com
APTI	Apptio, Inc.	Enable IT leaders to analyze, optimize, and plan technology investments, and to benchmark their financial and operational performance against peers	http://www.apptio.com/
TEAM	Atlassian Corporation Plc	Offer project tracking, content creation and sharing, real-time communication, and service management products to large and small organizations	https://www.atlassian.com/
BNFT	Benefitfocus, Inc.	Benefits management platform for employers and carriers	https://www.benefitfocus.com
BL	BlackLine, Inc.	Provides financial accounting close solutions to address various aspects of the financial closing process	https://www.blackline.com/
BOX	Box, Inc.	Application that allows for the storage, management and sharing of content online	https://www.box.com
BCOV	Brightcove Inc.	Media, Marketing & Enterprise: Video marketing suite and video delivery	https://www.brightcove.com

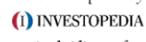
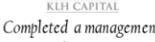
FOUNDERS SAAS INDEX KEY, CONT'D

Ticker	Company Name	Vertical/Business Description	Website
Horizontal SaaS Companies			
CARB	Carbonite, Inc.	Automatic cloud backup for businesses and consumers	https://www.carbonite.com
CSLT	Castlight Health, Inc.	Health benefits platform that engages employees to make better healthcare decisions and enables employers to communicate and evaluate their benefit programs	https://www.castlighthealth.com
ECOM	ChannelAdvisor Corporation	E-commerce: Platform that enables retailers and brands to manage their e-commerce operations	https://www.channeladvisor.com
CTXS	Citrix Systems, Inc.	Solutions that power business mobility through secure, mobile workspaces that provide instant access to apps, desktops, data and communications on any device, over any network and cloud	https://www.citrix.com
CSOD	Cornerstone OnDemand, Inc.	Applications to recruit, train, manage and connect people across an organization	https://www.cornerstoneondemand.com
COUP	Coupa Software Incorporated	Provides a cloud-based spend management platform	http://www.coupa.com/
EVBG	Everbridge, Inc.	Provides critical communications and enterprise safety applications that enable customers to automate and accelerate the process of keeping people safe and businesses running during critical events	https://www.everbridge.com/
FIVN	Five9, Inc.	Contact Centers: Virtual contact center platform	https://www.five9.com
HUBS	HubSpot, Inc.	Customer relationship management, marketing, and sales solutions	https://www.hubspot.com
KXS	Kinaxis Inc.	Manufacturing: Supply chain management solutions	https://www.kinaxis.com
LPSN	LivePerson, Inc.	Enables mobile and online messaging between brands and consumers	https://www.liveperson.com
LOGM	LogMeIn, Inc.	Suite of products that enable individuals and business to securely connect with their workplace, colleagues and customers	https://www.logmeininc.com
MRIN	Marin Software Incorporated	Performance advertising platform	https://www.marinsoftware.com
MIME	Mimecast Limited	Cloud security and risk management	https://www.mimecast.com
MOBL	MobileIron, Inc.	Enterprise mobility management tools including traditional mobile device management, mobile application management, and mobile content management capabilities	https://www.mobileiron.com
MODN	Model N, Inc.	Life Sciences and Technology: Revenue management solutions	https://www.modeln.com
PAYC	Paycom Software, Inc.	Human capital management software	https://www.paycom.com
PCTY	Paylocity Holding Corporation	Payroll and human capital management solutions for medium sized organizations	https://www.paylocity.com
PEGA	Pegasystems Inc.	Customer relationship management applications, application development platform, and operations applications	https://www.pegacom
PFPT	Proofpoint, Inc.	Enables large and mid-sized organizations to defend, protect, archive, and govern their sensitive data worldwide	https://www.proofpoint.com/us
QLYS	Qualys, Inc.	Information security and compliance solutions	https://www.qualys.com
RNG	RingCentral, Inc.	Cloud-based business communications	https://www.ringcentral.com
CRM	salesforce.com, inc.	Customer relationship management	https://www.salesforce.com

FOUNDERS SAAS INDEX KEY, CONT'D

Ticker	Company Name	Vertical/Business Description	Website
Horizontal SaaS Companies			
SCWX	SecureWorks Corp.	Provides information security services, protecting its customers' computers, networks and information assets from malicious activity such as cybercrime	https://www.secureworks.com
NOW	ServiceNow, Inc.	Suite of products including service management, IT service management, IT operations management and business management solutions	https://www.servicenow.com
SHOP	Shopify Inc.	E-commerce/Retail: E-commerce platform for small and medium-sized businesses	https://www.shopify.ca
ULTI	The Ultimate Software Group, Inc.	Human resources and payroll solutions	https://www.ultimatesoftware.com
UPLD	Upland Software, Inc.	Enterprise work management products that enable document and workflow automation, financial management, mobile engagement management, professional services automation, etc.	https://uplandsoftware.com
VRNS	Varonis Systems, Inc.	Platform that enables enterprises to map, analyze, manage, and migrate their unstructured data	https://www.varonis.com
WIX	Wix.com Ltd.	Offer Web development, design, and management solutions and apps through an online platform that enables its user base of businesses, organizations, professionals, and individuals to create a digital presence	https://www.wix.com/
WDAY	Workday, Inc.	Financial management and human capital management solutions	https://www.workday.com
WK	Workiva Inc.	All-in-one platform for risk, audit, finance and compliance	https://www.workiva.com
ZEN	Zendesk, Inc.	Customer service platform	https://www.zendesk.com
ZIXI	Zix Corporation	Email encryption/security	https://www.zixcorp.com

FOUNDERS TECHNOLOGY TRANSACTIONS

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<p>RothIRA.com</p> <p>Has been acquired by</p>  <p>A subsidiary of</p>  <p>Sell-Side Advisor</p>	<p>on INTERACTIVE</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>money under 30</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>A Vertical Software Provider</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>GradesFirst</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>DAMAC PREMIUM BUSINESS PRODUCTS</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>K-12 Content & Messaging Platform</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>
<p>SmarterServices Helping your business flourish and grow</p> <p>Has been recapitalized by</p>  <p>Sell-Side Advisor</p>	<p>TICKET • BISCUIT</p> <p>Has been recapitalized by</p>  <p>Financial Advisor</p>	<p>Ministry Brands and</p> <p>in10sity</p> <p>Have been acquired by</p>  <p>Sell-Side Advisor</p>	<p>ACTEKSOFT INTEGRATE AUTOMATE COMPENSATE RELATE</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>SHIPT</p> <p>Has secured growth capital from</p>  <p>Strategic Advisor</p>	<p>HEALTH INFORMATION DESIGNS</p> <p>Has been recapitalized by</p>  <p>Financial Advisor</p>	<p>LowCards.com The #1 Rated Source for Credit Card Information</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>
<p>SOUTH CYPRESS</p> <p>Has secured growth funding from</p>  <p>Financial Advisor</p>	<p>YOU CARING</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>netDirectMerchants</p> <p>Has been recapitalized by</p>  <p>Financial Advisor</p>	<p>FlexOffers.com</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>TriNovus</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>redOrbit</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>USDiagnostics</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>
<p>MMA MAGAZINE GROUP</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>ENGINEERJOBS.com</p> <p>Has been acquired by</p> <p>An Undisclosed Strategic Buyer</p> <p>Sell-Side Advisor</p>	<p>ABOUT AIRPORT PARKING</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>ElderCareLink</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>CreditCardForum For Consumers. By Consumers.</p> <p>Has been acquired by</p> <p>An Undisclosed Strategic Buyer</p> <p>Sell-Side Advisor</p>	<p>BARGAINERING</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>Netbook Academy</p> <p>Has been acquired by</p> <p>IReviews, Inc.</p> <p>Sell-Side Advisor</p>
<p>fivecentnickel.com BECAUSE MONEY MATTERS</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>nursing jobs.org</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>TICKET • BISCUIT</p> <p>Has secured growth funding from</p>  <p>Financial Advisor</p>	<p>ASR NETWORKING & ALLSTAR RECOVERY</p> <p>Backed by Private Equity Partner</p>  <p>Completed a management buyout</p> <p>Financial Advisor</p>	<p>Milton Mile Secrets For the Millennial</p> <p>Has been acquired by</p> <p>An Undisclosed Strategic Buyer</p> <p>Sell-Side Advisor</p>	<p>APPLIED ULTRASONICS THE ULTRASONIC SOURCE</p> <p>Has been acquired by</p> <p>A Fortune 100 Company</p> <p>Sell-Side Advisor</p>	<p>Top Insurance Lead-Gen Company</p> <p>Has been acquired by</p>  <p>Financial Advisor</p>
<p>reveal technologies</p> <p>Has been acquired by</p>  <p>Founder</p>	<p>MAGIC INC. Comprehensive Screening Solutions</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>CreditorWeb Empower yourself.</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>BigCityDocs, LLC</p> <p>Has secured growth funding from</p>  <p>Financial Advisor</p>	<p>GO2</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>PORTFOLIO OF TRUCKING EMPLOYMENT WEBSITES OWNED BY</p> <p>VERTICAL ALLIANCE Group, Inc.</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>Petri IT Knowledgebase</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>
<p>CONSUMERISM COMMENTARY</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>Bankaholic Bringing you the best in banking</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>FAREHOMES</p> <p>Has been acquired by</p> <p>Digital Media Holdings, LLC</p> <p>Sell-Side Advisor</p>	<p>CardOffers.com</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>GetRich Slowly Personal Finance That Makes Cents</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>oh my veggies</p> <p>Has been acquired by</p>  <p>Sell-Side Advisor</p>	<p>RothIRA.com</p> <p>Has been recapitalized by</p>  <p>Financial Advisor</p>



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