Q4: Quarterly Industry Update

AS OF December 31, 2018



Fintech - SaaS

INDUSTRY SUMMARY

COGENT VALUATION identified Fintech SaaS publicly traded companies, IPOs, and recent M&A transactions within the Financial SaaS industry, which provides a basis for market and transaction pricing that can be used by your firm in estimating market sentiment and its impact on your firm's value. Over the last year since December 31, 2017, the median 52-week share price return of the Financial SaaS industry was 35.1%. Between December 31, 2016 and December 31, 2018, the median EV/EBITDA multiple decreased from 32.6 to 32.1. However, the median price-to-earnings multiple increased from 63.6 to 93.3 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were 1.9% and 10.4%, respectively.

Public Company **Key Statistics**

Median 52-Week	Median Year
Return	Return
34.2%	34.2
Median EV/EBITDA	Median Price
Multiple	Multiple
32 1x	7 8 y

Median	Year	to	Date	
Return				

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Median EV/Revenue Multiple

7.8x

Median EV/Gross CF Multiple

37.3x

Comparable Public Company Market Price Returns as of December 31, 2018

	YTD	3 Month	1 Year	2 Year	3 Year	5 Year	2017	2016	2015	2014	2013
2U, Inc.	16.6%	30.3%	111.9%	92.8%	48.7%	N/A	114.0%	7.8%	42.3%	N/A	N/A
Alarm.com Holdings, Inc.	52.1%	0.0%	22.8%	26.2%	N/A	N/A	35.6%	66.8%	N/A	N/A	N/A
Amber Road, Inc.	31.1%	21.3%	15.3%	28.3%	-1.3%	N/A	-19.2%	78.4%	-50.2%	N/A	N/A
AppFolio, Inc.	88.9%	-1.6%	50.2%	82.7%	N/A	N/A	74.0%	63.4%	N/A	N/A	N/A
Apptio, Inc.	57.1%	20.5%	141.6%	N/A	N/A	N/A	26.9%	N/A	N/A	N/A	N/A
athenahealth, Inc.	0.4%	7.5%	26.9%	1.5%	6.2%	8.1%	26.5%	-34.7%	10.5%	8.3%	83.5%
Benefitfocus, Inc.	49.8%	-9.6%	-12.7%	-14.5%	-12.8%	N/A	-9.1%	-18.4%	10.8%	-43.1%	N/A
BlackLine, Inc.	72.2%	19.5%	31.8%	N/A	N/A	N/A	18.7%	N/A	N/A	N/A	N/A
Box, Inc.	13.2%	-2.7%	26.0%	29.5%	1.3%	N/A	52.4%	-0.7%	N/A	N/A	N/A
Brightcove Inc.	35.9%	-2.1%	-21.9%	5.5%	-1.8%	2.3%	-11.8%	29.8%	-20.3%	-45.0%	56.4%
Carbonite, Inc.	39.0%	14.7%	41.9%	90.1%	26.3%	21.3%	53.0%	67.3%	-31.3%	20.6%	27.9%
Castlight Health, Inc.	13.3%	-2.7%	0.0%	4.7%	-22.2%	N/A	-24.2%	15.9%	-63.5%	N/A	N/A
ChannelAdvisor Corporation	56.1%	1.1%	-18.4%	-10.1%	-2.1%	N/A	-37.3%	3.6%	-35.8%	-48.3%	N/A
Cornerstone OnDemand, Inc.	34.2%	10.7%	0.6%	9.2%	10.6%	2.8%	-16.5%	22.5%	-1.9%	-34.0%	80.5%
Coupa Software	99.4%	46.1%	79.6%	N/A	N/A	N/A	24.8%	N/A	N/A	N/A	N/A
Everbridge, Inc.	59.6%	23.1%	78.3%	N/A	N/A	N/A	61.1%	N/A	N/A	N/A	N/A
Five9, Inc.	38.9%	19.7%	81.0%	83.1%	75.0%	N/A	75.3%	63.1%	94.2%	N/A	N/A
HubSpot, Inc.	22.5%	22.5%	78.9%	57.6%	39.5%	N/A	88.1%	-16.5%	67.5%	N/A	N/A
Instructure, Inc.	27.3%	27.3%	80.1%	53.3%	N/A	N/A	69.3%	-6.1%	N/A	N/A	N/A

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Comparable Public Company Market Price Returns as of December 31, 2018

	YTD	3 Month	1 Year	2 Year	3 Year	5 Year	2017	2016	2015	2014	2013
LogMeIn, Inc.	0.9%	0.9%	18.5%	51.3%	27.3%	43.2%	18.6%	43.9%	36.0%	47.1%	49.7%
Mimecast Limited	23.6%	23.6%	58.2%	90.8%	N/A	N/A	60.2%	86.5%	N/A	N/A	N/A
MINDBODY, Inc.	27.8%	27.8%	41.7%	70.8%	N/A	N/A	43.0%	40.8%	N/A	N/A	N/A
New Relic, Inc.	28.3%	28.3%	99.9%	68.6%	28.8%	N/A	104.5%	-22.5%	4.6%	N/A	N/A
Paycom Software, Inc.	33.7%	33.7%	86.7%	73.7%	49.6%	N/A	76.6%	20.9%	42.9%	N/A	N/A
Paylocity Holding Corporation	8.6%	8.6%	32.6%	25.1%	21.4%	N/A	57.1%	-26.0%	55.3%	N/A	N/A
Proofpoint, Inc.	28.0%	28.0%	52.8%	45.4%	24.3%	46.5%	25.7%	8.7%	34.8%	45.4%	169.5%
Q4 Holdings, Inc.	23.6%	23.6%	30.7%	37.7%	29.2%	N/A	27.7%	9.4%	40.0%	N/A	N/A
Qualys, Inc.	22.6%	22.6%	92.0%	69.5%	16.1%	42.6%	87.5%	-4.4%	-12.3%	63.3%	56.3%
Real Matters Inc.	-29.7%	-29.7%	N/A								
RealPage, Inc.	16.3%	16.3%	47.6%	57.2%	36.7%	20.0%	47.7%	33.6%	2.2%	-6.1%	8.4%
RingCentral, Inc.	31.2%	31.2%	124.4%	100.8%	60.6%	N/A	135.0%	-12.6%	58.0%	-18.8%	N/A
Salesforce.com, Inc.	13.8%	13.8%	41.0%	25.5%	20.3%	21.1%	49.3%	-12.7%	32.2%	7.5%	31.3%
ServiceNow, Inc.	26.9%	26.9%	89.2%	64.4%	28.1%	35.5%	75.4%	-14.1%	27.6%	21.1%	86.5%
Shopify Inc.	23.4%	23.4%	83.0%	110.2%	N/A	N/A	135.6%	66.2%	N/A	N/A	N/A

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Comparable Public Company Market Price Returns as of December 31, 2018

	YTD	3 Month	1 Year	2 Year	3 Year	5 Year	2017	2016	2015	2014	2013
SPS Commerce, Inc.	31.9%	31.9%	9.5%	22.2%	-1.5%	8.5%	-30.5%	-0.5%	24.0%	-13.3%	75.2%
Ultimate Software Group	11.7%	11.7%	24.8%	12.2%	12.8%	18.5%	19.7%	-6.7%	33.2%	-4.2%	62.3%
Twilio Inc.	61.8%	61.8%	32.2%	N/A	N/A	N/A	-18.2%	N/A	N/A	N/A	N/A
Veeva Systems Inc.	32.1%	32.1%	42.4%	70.8%	41.9%	N/A	35.8%	41.1%	9.2%	-17.7%	N/A
Workday, Inc.	24.9%	24.9%	52.6%	28.6%	14.6%	15.6%	53.9%	-17.1%	-2.4%	-1.9%	52.6%
Workiva Inc.	10.7%	10.7%	51.4%	42.6%	18.1%	N/A	56.8%	-22.3%	31.1%	N/A	N/A
Xero Limited	14.9%	14.9%	86.0%	54.9%	13.1%	22.6%	82.3%	-9.6%	4.8%	-52.3%	332.8%
Zendesk, Inc.	41.5%	41.5%	70.7%	51.2%	28.3%	N/A	59.6%	-19.8%	8.5%	N/A	N/A
Median of Industry Public Companies	53.8%	20.9%	47.5%	51.3%	20.8%	20.5%	49.3%	5.7%	10.8%	-5.1%	59.4%

Public Company Median Multiples by Quarter

	12/31/18	9/30/18	6/01/18	3/31/18	12/31/17	3/31/17	12/31/16	6/30/16
EV/Revenues Multiple	7.8x	8.3x	7.2x	7.4x	7.0x	5.8x	6.6x	5.6x
EV/EBITDA Multiple	32.1x	35.3x	34.3x	37.3x	36.4x	37.4x	31.4x	37.2x
Price/Earnings Multiple	93.3x	65.5x	87.1x	77.5x	72.3x	63.6x	78.9x	71.1x
EV/Gross Cash Flows Multiple	37.3x	54.1x	41.7x	45.4x	50.3x	52.2x	52.1x	32.4x
Highest Multiple Lowest Multiple	M edian	Multiple						

Initial Public Offerings Fintech - SaaS (dollars in millions, except share prices)

Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
12/17/18	Tecnos Data Science Engineering Incorporated	\$28.32	2.5	\$35.1	N/A	N/A	N/A	N/A	N/A	N/A
11/6/18	Yusys Technologies Co., Ltd.	\$1.21	0.4	\$5.2	\$16.4	\$1.7	\$262.4	\$4.1	\$2.5	\$4.1
10/15/18	identitii Limited	\$0.54	5.3	\$23.2	\$10.3	\$6.6	\$1.3	\$3.1	\$1.7	\$3.3
6/26/18	Property Data Bank, Inc.	\$16.19	78.0	\$324.1	\$85.7	\$0.0	\$11.7	\$22.5	\$11.6	\$23.1
6/14/18	Huifu Payment Limited	\$0.96	30.0	\$4.5	\$1.7	\$3.1	\$265.3	(\$1.3)	(\$1.9)	(\$1.2)
5/23/18	CLPS Incorporation	\$5.25	8.6	\$146.2	\$331.2	\$65.8	\$39.2	(\$19.2)	(\$30.7)	(\$15.4)
9/28/17	Money Forward, Inc.	\$13.76	0.2	\$3.1	\$24.6	\$11.0	N/A	\$3.2	\$1.5	\$3.9
9/19/17	Needs Well Inc.	\$14.97	105.0	\$2,371.3	\$4,393.0	\$2,116.0	\$45.3	\$286.4	\$49.3	\$315.4
7/20/17	Seamless Distribution Systems AB (publ)	\$4.38	0.0	\$9.1	\$1.4	\$0.0	\$11.3	\$0.6	\$0.4	\$0.6
5/26/17	Alfa Financial Software Holdings PLC	\$4.16	18.8	\$11.2	\$1.4	\$0.0	\$90.5	(\$2.2)	(\$2.2)	(\$2.2)
9/23/16	Servtech Global Holdings Limited	\$0.15	0.1	\$2.6	\$17.1	\$2.3	\$6.0	\$0.0	(\$0.0)	\$0.0
10/27/15	Equiniti Group plc	\$2.53	192.0	\$485.0	\$1,261.0	\$477.0	\$536.9	\$97.8	(\$66.7)	\$104.1
5/20/15	Shopify Inc.	\$17.00	7.7	\$130.9	\$97.3	\$0.0	\$123.6	N/A	(\$20.5)	(\$10.2)

Multiple year periods are calculated as the average annual return.

Highest Return Lowest Return Median Return

Initial Public Offerings Fintech - SaaS (dollars in millions, except share prices)

Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
12/11/14	Workiva Inc.	\$14.00	7.2	\$100.8	\$82.6	\$36.6	\$106.1	(\$30.6)	(\$35.5)	(\$27.0)
10/2/14	Yodlee, Inc.	\$12.00	6.3	\$75.0	\$43.6	\$12.1	\$84.3	\$4.2	(\$1.3)	\$7.6
8/4/14	FairFX Group Plc	\$0.76	5.7	\$4.3	\$19.4	\$0.8	\$704.6	(\$0.5)	(\$0.5)	(\$0.4)
7/9/14	Digiliti Money Group, Inc.	\$1.50	4.5	\$6.8	\$3.5	\$13.1	\$1.8	(\$7.8)	(\$12.2)	(\$7.5)
3/19/14	Q4 Holdings, Inc.	\$13.00	7.8	\$100.9	\$61.1	\$7.6	\$56.9	(\$14.2)	(\$17.9)	(\$11.2)
12/9/13	Link Mobility Group ASA	\$3.58	1.4	\$4.9	\$12.0	\$0.9	\$22.2	\$1.4	\$1.9	\$1.5
10/15/13	Tungsten Corporation Plc	\$3.59	71.1	\$255.4	\$297.1	\$0.0	\$0.6	\$0.0	(\$9.4)	\$0.0
9/25/13	Finsoft Financial Investment Holdings Limited	\$0.11	50.0	\$5.3	\$3.0	\$0.0	\$4.4	\$1.8	\$0.9	\$1.8
11/26/12	FinTech Chain Limited	\$0.63	4.0	\$2.5	\$3.6	\$0.0	\$0.2	(\$1.0)	(\$1.1)	(\$1.0)
10/11/12	Workday, Inc.	\$28.00	22.8	\$637.0	\$267.2	\$16.1	\$199.1	(\$75.8)	(\$90.3)	(\$62.7)
7/19/11	Zillow Group, Inc.	\$20.00	3.5	\$69.2	\$33.9	\$0.0	\$44.9	\$1.1	(\$1.2)	\$2.6
	Median of all IPOs	nm	nm	\$29.1	\$24.6	\$2.3	\$44.9	\$0.0	(\$1.2)	\$0.0

Multiple year periods are calculated as the average annual return.

Highest Return Lowest Return Median Return

Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

Transaction Date	¹ Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
12/21/18	Avoka Technologies Pty, Ltd.	Temenos AG	\$245.0	55%	\$14.7	N/A
11/15/18	Hyperwallet Systems Inc.	PayPal Holdings, Inc.	\$400.0	100%	\$78.0	2.3x
10/1/18	Agiletics, Inc.	Jack Henry & Associates, Inc.	\$6.3	100%	N/A	1.6x
9/4/18	Miles Software Solutions (P) Ltd.	Itz Cash Card Ltd.	\$27.5	100%	\$18.7	5.3x
8/21/18	Thumbworks Technologies Pvt. Ltd.	CapFloat Financial Services Private Limited	\$29.9	100%	\$43.1	N/A
7/30/18	Vipera Plc	Sella Open Fintech Platform S.P.A. (nka:Fabrick S.p.A)	\$19.4	100%	\$1,213	6.0x
5/10/18	Inworx S.A de CV	Charles Taylor InsureTech.	\$50.5	100%	N/A	4.8x
4/6/18	CAD IT S.p.A.	Quarantacinque Srl	\$44.1	100%	\$32.6	N/A
3/31/18	Ensenta Corporation	Warburg Pincus LLC	\$419.0	100%	\$27.0	2.1x
2/28/18	BluePay, Inc.	Verdane Capital	\$60.8	100%	N/A	N/A
9/28/17	eg solutions plc	UTIB INVL Technology	\$5.8	77%	\$3.1	2.4x



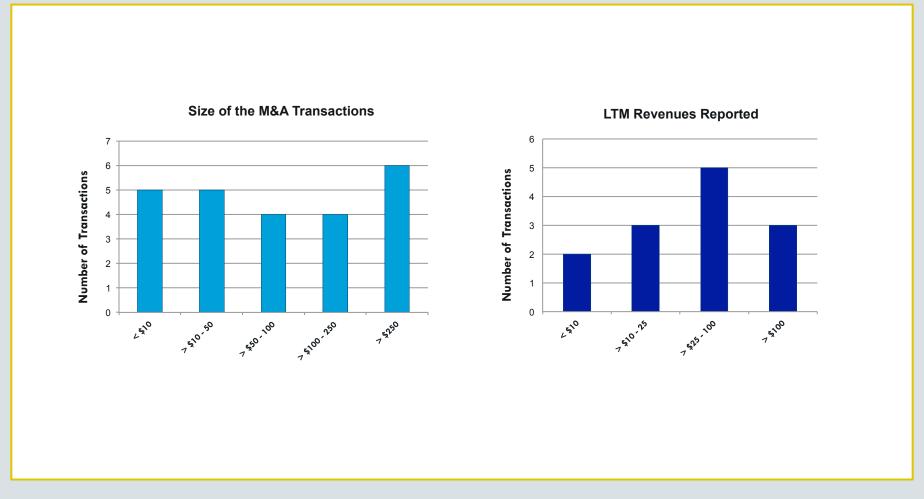
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Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

Transaction Date	n Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
9/28/17	Unafortis AG	Luxoft Global Operations	\$17.2	100%	N/A	N/A
9/1/17	Monitise plc	Fiserv (Europe) Limited	\$95.1	100%	\$81.2	0.7x
8/28/17	Meontrust Inc.	Inside Secure S.A.	\$6.0	100%	N/A	N/A
8/14/17	Decillion Solutions Pte Ltd	Bottomline Technologies	\$4.6	100%	N/A	N/A
8/11/17	Horizon Globex	N/A	\$2.0	100%	N/A	N/A
8/10/17	Mercury Network, LLC	CoreLogic, Inc.	\$153.0	100%	N/A	N/A
8/3/17	SoftTelecom Desarrollos I Mas	Vipera Plc	\$1.5	100%	\$0.9	1.6x
7/5/17	CardConnect Corp.	First Data Corporation	\$727.7	100%	\$616.0	1.2x
7/3/17	Archway Technology Partners	SEI Investments Co.	\$88.0	100%	\$17.9	4.9x
6/29/17	Credit.fr, SAS	Tikehau Capital	\$13.7	96%	N/A	N/A
6/13/17	DH Corporation	Misys Limited	\$3,502.0	100%	\$1,250.0	2.8x
6/6/17	Banking Computer Services	Network For Electronic Transfers	\$27.1	100%	N/A	N/A
5/22/17	Rubik Financial Limited	Temenos Solutions Australia	\$62.2	100%	\$32.0	1.9x
	Median of the 24 M&A Transaction	1 Targets	\$79.5	100%	\$32.0	2.3x



Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions) as of December 31, 2018





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Definitions of Financial Terms Used in this Quarterly Industry Update:

Enterprise Value (EV): Market Value of Equity + Market Value of Debt —Cash

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA): Profitability metric sometimes also referred to as operating profit or operating earnings.

Gross Cash Flows: Net Income + Depreciation and Amortization Expense

Latest Twelve Months (LTM): Financial information is as of the latest twelve months through the date of this Quarterly Industry Update.

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