December 13, 2018 05:01 AM GMT

## FireEye Inc | North America

# Approaching Fair Value; Downgrading to Equal-weight

⊯ Stock Rating Equal-weight ∞ Industry View Attractive Price Target
\$21.00

Performance at FEYE has been more consistent YTD, with double-digit ARR growth on the back of a more compelling product portfolio and continued op. leverage. However, with FEYE as a recent relative outperformer and our SoTP suggesting limited upside to our \$21 PT, we take profits and move to EW.

WHAT'S	FireEye Inc (FEYE.O)	From	То
VUNAIS	Rating	Overweight	Equal-weight
CHANGED	Rating	overweight	_qua noight

#### Better Execution, Better Product Portfolio, but More Limited Room for the

**Stock.** Our previous Overweight rating was based on our view that an improving product portfolio, a ramping renewal base, and better execution would drive improved investor sentiment and FY18 estimates higher. This thesis has largely come to fruition YTD, with FY18 billings estimates moving higher since the beginning of FY18 (by ~2%) and annualized recurring revenue sustaining low teens growth. We continue to believe that FireEye's simplified go-to market and pricing strategy, revitalized salesforce, and built-out product portfolio will allow the company to sustain low teens billings growth through FY19, even as comps get more difficult.

Looking beyond FY19, FireEye will continue to see a moderating headwind from declining product revenues, but this may be offset by a moderating tailwind from subscription/maintenance base up for renewal in FY20 (according to our calc). This puts the onus on accelerating new growth in FY20 and beyond to achieve management's FY22 outlook. The success they've seen to date with new products (virtual appliances, Cloud MVX, Cloud Email, next-gen endpoint, and Helix) at 49% of product bookings YTD, up ~31% YoY, points to a path for this accelerating growth. But the improved market momentum they've seen of late will need to continue as the new products gain greater scale and sales execution has more limited room for error.

**Recent Outperformance Reflects This Improved Product Positioning.** FEYE's recent outperformance reflects greater investor enthusiasm around FireEye's market positioning, sales execution and ability to deliver leverage. FEYE is up 20% in the past three months vs. average software down 9% and up 38% YTD, in line with software YTD, but well ahead of the NASDAQ up 2%. While FireEye is not expensive at 4.4x EV/ CY20 sales vs. security average at 5.9x, we believe a



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#### FireEye Inc (FEYE.O, FEYE US)

Software / United States of America	

Stock Rating			Equa	l-weight
Industry View			Α	ttractive
Price target				\$21.00
Shr price, close (Dec 12,	2018)			\$19.52
Mkt cap, curr (mm)				\$3,917
52-Week Range			\$20.6	51-13.60
Fiscal Year Ending	12/17	12/18e	12/19e	12/20e
ModelWare EPS (\$)	(1.19)	(1.00)	(0.79)	(0.77)
Prior ModelWare EPS	-	(1.00)	(0.79)	(0.77)
(\$)				
P/E	NM	NM	NM	NM
Consensus EPS (\$)§	(0.18)	0.08	0.19	0.31
Div yld (%)	-	-	-	-

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework

§ = Consensus data is provided by Thomson Reuters Estimates

e = Morgan Stanley Research estimates

QUARTER	RLY MODE	LWARE E	PS (\$)		
Quarter	2017	2018e Prior	2018e Current	2019e Prior	2019e Current
Q1	(0.36)	-	(0.32)a	(0.28)	(0.27)
Q2	(0.30)	-	(0.30)a	(0.19)	(0.19)
Q3	(0.30)	-	(0.18)a	(0.13)	(0.13)
Q4	(0.22)	(0.20)	(0.20)	(0.20)	(0.20)

e = Morgan Stanley Research estimates, a = Actual Company reported data

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discount is appropriate in light of slower growth (7% from CY18-CY20e vs. security peers at 21%). Our \$21 PT finds support in our updated SoTP analysis which assumes 1x CY20 product revenue, 6x CY20 subscription revenue (in line with the average SaaS rev. multiple) and 1.5x Mandiant revenue.

A Favorable Set-up for Low Teens Growth in FY19... At the 2018 Analyst Day in March, management provided a framework to FY22 billings of \$1,310M, implying a CAGR of ~12% from FY18-FY22 vs. current guide of ~10% in FY18. While FY18 benefits from an easy comp (billings -7% YoY in FY17), we believe that FireEye can sustain low teens billings growth in FY19 as it benefits from 1) **a lower drag** from product billings, as we assume product mix moves from 15% of billings in FY18 to 13% in FY19e and as declines moderate; 2) continued healthy growth in renewal subscription/maintenance billings, up 21% YoY in FY19e vs. +26% in FY18e; and 3) continued growth in new subscription billings, with our conservative estimates looking for new subscription billings up only 2% in FY19e vs. 11% in FY18e.

... But Accelerating Adoption in New Products Necessary for Longer-Term Outlook. However, looking into FY20 and beyond, the set-up may be more challenging as we calculate a lower base of subscriptions up for renewal (with the weak FY17 base more fully up for renewal), putting the onus more on a growing contribution from the new products to achieve the modest acceleration implied in the FY22 framework. Given it's still early days for some of FireEye's newer products (namely Helix and related "spokes"), our top-line estimates look for a ~9% billings CAGR through FY22, modestly below management's longer term outlook.

**Rolling Forward Our PT to CY20, PT Stays at \$21.** We keep our PT at \$21, based off of a) FY24 FCF of \$336M versus our prior PT based off of FY23 FCF of \$325M; and b) a multiple of 21x FY24 FCF, in line with the average FY20 FCF multiple across large cap software vs. prior multiple of 24x FY23 FCF (which was in line with the average FY19 FCF multiple across large cap software last month).

What Would Drive Our Bull Case? Our Bull Case scenario assumes FireEye accelerates billings growth to mid to high teens over the next few years (slightly ahead of management's guidance of ~12%), alongside meaningful margin leverage. Several factors could drive FEYE towards our Bull Case scenario of \$38: 1) FireEye's Helix Solution evolves to become a widely adopted security analytics and orchestration platform; 2) Simplified product pricing and new bundling strategy helps FireEye more effectively target the low end enterprise / mid market; and 3) M&A transactions boost the group and highlight the potential strategic value of FireEye. We've seen a slight pick up in M&A transactions in software YTD with 10 acquisitions of publicly traded software companies YTD in 2018 vs. 8 in 2017.





#### Risk Reward

## Transition into a Broader Platform Story, But Balanced Risk/Reward



#### Price Target \$21

Based off of 21x CY24 FCF, discounted at 11%

## Bull \$38

Discount of 28x Bull Case 2024e FCF of \$498M

# **FireEye becomes a key beneficiary of consolidating security spend as its platform story takes off with Helix.** Broad market adoption drives FEYE's customer base to grow at a 15% CAGR from CY18 to CY24 to reach ~18K. With meaningful expansion within the existing base, total revenue reaches \$1.6B by CY24. FCF margins improve, reaching 32% by CY24. A robust growth rate sustains FEYE's multiple at 28x EV/FCF in CY24, yielding \$38/share, assuming a 11% discount rate.

#### Base \$21

#### Discount of 21x Base Case 2024e FCF of \$336M

**FireEye's broader product suite drives stable growth.** Expansion among existing customers and sustained new customer adoption drives total revenue to \$1.2B by CY24, a 7% CAGR. FCF margins improve to 28% by CY24 through S&M and R&D leverage and a growing recurring rev. base. FEYE's growth rate remains robust and FEYE trades at 21x EV/FCF in CY24 in line with security peers, yielding \$21/share, discounted at a 11% rate.

#### Bear

#### Discount of 14x Bear Case 2024e FCF of \$203M

**\$9** 

#### Minimal traction outside of its niche market yields slow customer adoption.

FireEye remains a niche high end enterprise solution, driving decelerating customer growth to reach 15K customers by CY24. Sales of subscription products underperform, penetration into the existing customer base slows down and total license per customer declines single digits to reach total revenue of \$931M by CY24. FCF margins increase to 22% in CY24. Because of lower growth, FEYE trades at 14x EV/FCF in CY24.

#### **Investment Thesis**

FireEye is executing towards a comprehensive platform for detecting, blocking and remediating threats across multiple vectors and through multiple deployment options. A broad but well integrated product portfolio places FireEye more squarely in the secular trend of consolidation, allows FireEye to address a broader market opportunity (beyond high end enterprise) and allows FireEye to benefit from the shift towards subscriptions. FireEye's simplified go-to market and pricing strategy, revitalized salesforce, and built-out product portfolio will allow the company to sustain low teens billings growth through FY19, although the set up for double digit growth may be more challenging in FY20 and beyond.

 We see FireEye continuing to deliver S&M leverage through a growing upsell opportunity and a more mature sales force.
 We see a long-term path to 20%+ operating margins, with improved gross margins (through more subscription adoption), greater sales productivity and R&D spending discipline.

■ FEYE currently trades at 4.4x CY2Oe revenue versus its security peers at an average of 5.9x. Our price target of \$21 assumes FEYE trades in line with large cap software at 21x FCF, a fair multiple, in our view as its large market opportunity, expanding upsell opps and durable base is balanced by mixed historical execution and a heightened competitive environment.

## Key Value Drivers

New customer wins (+18% YoY customer base growth in FY17).

Ramping adoption of new solutions, particularly subscription products like Helix.

Improved sales productivity driving greater
 S&M spending leverage.

## Potential Catalysts

Customer uptake of new subscription services, including Helix, FireEye as a Service, and Threat Intelligence.

## UPDATE

Customer adoption of the new endpoint security solution.

Potential consolidation within the security industry.

### **Risks to Achieving Price Target**

■ Upside Risks: Several factors could drive FEYE towards our Bull Case scenario of \$38: 1) FireEye's Helix Solution evolves to become a widely adopted security analytics and orchestration platform, enabling FireEye to address security spend in new markets; 2) Simplified product pricing and new bundling strategy helps FireEye more effectively target the low end enterprise / mid market,; and 3) M&A transactions boost the group and highlight the strategic value of FireEye.

Downside Risks: Increased competition and limited traction with new products could drive substantially lower growth while lack of progress towards reaching profitability could lead to weaker stock price performance.With significant business model transitions, including new product releases, and a continued reliance on product sales, there is greater risk for execution challenges, driving fundamental (and stock) volatility.

UPDATE

# Analysis

#### Near-Term Set-up for FireEye Favorable

Near term, billings guidance implies growth of ~4% YoY in Q4 vs. 8% in Q3 and 13% YoY YTD. We think this outlook well accounts for comparables that are ~400 bps more difficult in Q4, particularly in light of the momentum we saw in Q3. While management hasn't yet guided to FY19, the longer-term outlook looks for an acceleration in billings to ~12% through FY22. Scrubbing through the model garners our conviction in low teens billings growth in FY19 although the model set up may be more challenging in FY20 and beyond.

- **Product Billings:** We look for appliance sales to continue to decline in FY19, but at a more moderate pace off of a smaller base, -3% YoY vs. -12% in FY18. We may see downside to this estimate if the appliance base shifts more quickly to virtual appliances than we assume, although this would be offset by greater subscription billings.
- Attached Subscription Billings: Despite continued declines in product billings, we are looking for modest growth in attached subscription billings in FY19 after 14% growth in FY18. Attached sub billings growth comes from growth in the renewal base,+6% YoY while new attached billings is down 4% YoY.
- Standalone Subscription Billings: Assuming healthy (+90%) renewal rates and shorter contract durations in line with current levels, we expect the standalone renewal base to accrue significant value through FY19, growing 37% YoY in FY19 after 48% growth in FY18. This drives total stand-alone billings up 28% YoY at a greater % of the mix (35% of billings in FY19 vs. 30% in FY18). This is conservative as we have only high single digit growth in new stand-alone subscriptions, which could hold upside as new offerings such as Helix, Cloud HX (cloud-based endpoint), and Managed Defense gain further traction. However, a lower stand-alone subscription base up for renewal in FY20 may present a drag on growth in FY20, according to our calculation.

**Exhibit 1:** Mix Shift and Solid Growth in Renewal Subscription Billings Should Drive Double Digit Billings Growth in FY19; FY20 May Face Slower Growth in Subscription Base Up for Renewal

	FY15	FY16	FY17	FY18E	FY19E	FY20E
1. Product Billings	<b>212.2</b>	<b>153.9</b>	<b>142.7</b>	<b>125.7</b>	<b>122.1</b>	<b>126.1</b>
YoY Growth	22%	-27%	-7%	-12%	-3%	<i>3</i> %
<b>2. Attached Billings</b>	<b>324.0</b>	<b>333.6</b>	<b>272.1</b>	<b>309.1</b>	<b>317.0</b>	<b>343.0</b>
YoY Growth	28%	<i>3%</i>	-18%	14%	<i>3</i> %	8%
Renewal Attached Billings	112.1	189.4	190.2	213.6	225.4	251.7
YoY Growth	102%	69%	0%	12%	6%	12%
New Attached Billings	211.9	144.2	81.9	95.5	91.6	91.3
YoY Growth	7%	-32%	-43%	17%	-4%	0%
<b>3. Standalone Billings</b>	<b>140.8</b>	<b>199.6</b>	<b>194.9</b>	<b>256.8</b>	<b>329.0</b>	<b>361.4</b>
YoY Growth	65%	42%	-2%	32%	28%	10%
Renewal Standalone Billings	24.5	43.6	120.7	179.2	244.8	249.1
YoY Growth		78%	177%	48%	37%	2%
New Standalone Billings	116.3	156.0	74.3	77.6	84.2	112.3
YoY Growth	36%	34%	-52%	5%	9%	33%
<b>4. Mandiant Billings</b>	<b>120.4</b>	<b>135.1</b>	<b>152.3</b>	<b>152.3</b>	<b>155.4</b>	<b>156.9</b>
YoY Growth	53%	12%	13%	<i>0</i> %	2%	1%
<b>Total Billings</b>	<b>797.4</b>	<b>822.3</b>	<b>762.0</b>	<b>843.9</b>	<b>923.5</b>	<b>987.5</b>
YoY Growth	35%	3%	-7%	11%	9%	7%

Source: Morgan Stanley Research, Company Data

**Exhibit 2:** Our FY19 Billings Estimate Will Continue to Benefit from 20%+ Growth in Renewal Billings, According to Our Calc, but New Billings Will Need to Accelerate by FY20



Source: Morgan Stanley Research, Company Data

# Room for Continued Margin Improvement, but Less Room for Another Inflection in Margin Improvement

A continued debate on FEYE is whether the company can continue to grow top-line while exercising cost discipline to reach profitability/margins levels closer to security peers. We still see room for margin improvement in FY19 as the sales force benefits from a simplified product portfolio, channel contribution grows and the subscription renewal base ramps. However, the bulk of the easy wins are behind FireEye, so sustaining expense growth well below revenue growth through FY22 may pose some challenges. FireEye did much of the heavy lifting in FY16 as a result of significant restructuring and optimization efforts in Q3/Q4, with expenses declining 12% YoY in

## UPDATE

2H16, resulting in +1% YoY total expense growth for the year vs. +23% in FY15. We forecast +6% operating margins in FY19 vs. ~3% in FY18, which assumes 3% growth in total expenses in FY19 vs. +6% growth in revenue. While management's LT target is 19-22% by FY24, we think this is a fairly high bar as it assumes accelerating margin leverage beyond FY18. We model operating margins at ~17% in FY24, modestly below management's LT target.







Source: Morgan Stanley Research, Company Data

## Valuation

FEYE has outperformed the market YTD, up 38% YTD vs. NASDAQ up 4%, but slightly below the security average up 40%. However, recent outperformance is more notable, with FEYE up 20% in the past three months vs. the security average -9%. And while FEYE is trading ~25% below security peers on an EV/CY20 revenue basis, it is currently trading ~20% ahead of its 2 year average. At 4.4x CY20 revenue vs. security average at 5.9x, we think FEYE's valuation appropriately reflects its lower growth profile (7% revenue CAGR from CY18-CY20 vs. average of security peers at 21%).

We keep our PT at \$21, backed by a) FY24 FCF of \$336M versus our prior PT based off of FY23 FCF of \$325M; and b) a multiple of 20x FY24 FCF, in line with the average FY20 FCF multiple across large cap software vs. prior multiple of 24x FY23 FCF (which was in line with the average FY19 FCF multiple across large cap software last month). Our \$21 PT finds support in our updated SotP analysis (Exhibit 8) which assumes 1x CY20 product revenue, 6.0x subscription revenue (in line with the average SaaS rev. multiple) and 1.5x Mandiant revenue (in line with IT services).



#### Exhibit 4: FEYE EV/Sales Historical Valuation



Source: Morgan Stanley Estimate, Thomson Reuters





Source: Morgan Stanley Estimate, Thomson Reuters



Exhibit 6: Despite FEYE's Low 2-Yr CAGR, They Trade Only at a Slight Discount to their Peers

Source: Morgan Stanley Estimate, Thomson Reuters



# **Exhibit 7:** FEYE Trades at 4.4x CY20 Revs, a 26% Discount to the Security Universe, But Appropriate in Light of Slower Growth

		Price	Market	Ent.		EV/Sales	3	Sales CAGR	EV/Sales/G	Op	erating Ma	rgin		EV/FCF	
Company	Ticker	12-Dec-18	Cap.	Value	2018E	2019E	2020E	'18-20E	2020E	2018	2019E	2020E	2018E	2019E	2020E
Tier 1: Security Universe															
Carbon Black	CBLK	\$15.33	\$1,228	\$1,064	5.1x	4.2x	3.5x	21%	0.16x	-27%	-23%	-15%	NM	NM	NM
CyberArk	CYBR	\$77.62	\$2,993	\$2,582	7.8x	6.4x	5.3x	21%	0.25x	24%	26%	27%	30.0x	25.0x	21.3x
ForeScout	FSCT	\$26.79	\$1,345	\$1,153	4.0x	3.3x	2.7x	21%	0.13x	-9%	-5%	1%	NA	NA	27.3x
Fortinet	FTNT	\$75.19	\$13,527	\$11,854	6.6x	5.8x	5.1x	14%	0.37x	22%	26%	26%	20.5x	17.5x	14.0x
Imperva	IMPV	\$55.52	\$2,102	\$1,707	4.9x	4.3x	3.8x	14%	0.28x	8%	11%	11%	26.8x	25.7x	24.0x
Okta	OKTA	\$67.03	\$8,690	\$8,133	11.4x	9.3x	7.7x	22%	0.36x	-8%	-5%	-1%	NM	NM	NM
Palo Alto Networks	PANW	\$189.52	\$19,620	\$17,475	6.8x	5.5x	4.5x	23%	0.20x	22%	30%	33%	18.4x	12.9x	10.8x
Proofpoint	PFPT	\$94.33	\$5,313	\$5,123	7.2x	5.9x	4.9x	22%	0.23x	10%	14%	17%	33.9x	26.3x	20.4x
Qualys	QLYS	\$81.09	\$3,453	\$3,060	11.0x	9.3x	7.9x	18%	0.45x	31%	37%	38%	32.3x	24.9x	20.9x
Rapid7	RPD	\$33.60	\$1,780	\$1,681	6.9x	5.8x	4.9x	19%	0.25x	-9%	-4%	2%	NM	NM	36.7x
SailPoint	SAIL	\$25.03	\$2,286	\$2,212	9.2x	7.4x	6.1x	22%	0.27x	12%	12%	15%	NM	NM	42.4x
Splunk	SPLK	\$109.40	\$17,571	\$16,401	9.4x	7.6x	6.3x	22%	0.28x	12%	18%	21%	NM	41.8x	28.3x
Tenable Holdings Inc	TENB	\$27.03	\$2,955	\$2,701	10.2x	8.1x	6.6x	24%	0.28x	-20%	-24%	-16%	NM	NM	NM
Zscaler Inc	ZS	\$41.22	\$5,498	\$5,200	22.9x	17.7x	13.7x	29%	0.47x	-8%	-1%	7%	NM	NM	NM
Average					8.8x	7.2x	5.9x	21%	0.28x	4%	8%	12%	27.0x	24.8x	24.6x
Median					7.5x	6.1x	5.2x	21%	0.28x	9%	12%	13%	28.4x	25.0x	22.7x
Fireeye	FEYE	\$19.52	\$4,290	\$4,153	5.0x	4.7x	4.4x	7%	0.67x	3%	7%	11%	NA	NM	33.0x

Source: Morgan Stanley Estimate, Thomson Reuters

#### Exhibit 8: Our Sum of the Parts Analysis Provides Support for our Price Target at \$21

	CY20 Revenue	Multiple	EV	
FireEye Subscription	\$661.3	6.0x	\$3,967.7	_
FireEye Product	\$126.1	1.0x	\$126.1	
Mandiant	\$148.9	1.5x	\$223.3	
			\$4,317.1	Total EV
			\$4,778.7	Market Cap
			\$21.7	Per Share

Source: Company Data, Morgan Stanley Research, Thomas Reuters

# Financials

#### Exhibit 9: FEYE: Income Statement

(\$ millions, Except Per-Share Data)							ſ										1				
					201					201					201						
	FY09	FY15	FY16	3/17	6/17	9/17	12/17	FY17	3/18	6/18	9/18	12/18E	FY18E	3/19E	6/19E	9/19E	12/19E	FY19E	FY20E	FY21E	FY22E
Product and Related Subscriptions and Support	1.4	216.6	437.2	112.2	119.1	121.9	126.3	479.5	121.1	122.4	127.0	126.2	496.7	122.4	123.1	126.5	129.1	501.0	510.7	530.1	555.7
YoY change		21.5%	101.8%	9.7%	9.7%	9.7%	9.7%	9.7%	7.9%	2.8%	4.2%	-0.1%	3.6%	1.0%	0.6%	-0.4%	2.3%	0.9%	1.9%	3.8%	4.8%
QoQ change				-2.6%	6.2%	2.4%	3.6%		-4.1%	1.1%	3.8%	-0.6%		-3.1%	0.6%	2.8%	21%				
Cloud Subscriptions and Managed Services	0.3	295.1	147.6	41.5	39.0	41.3	44.7	166.4	44.4	45.0	48.6	55.1	193.2	56.4	57.8	60.1	63.9	238.3	276.7	311.1	359.3
YoY change		68.3%	-50.0%	12.7%	12.7%	12.7%	12.7%	12.7%	6.8%	15.5%	17.9%	23.4%	16.1%	27.1%	28.4%	23.6%	15.9%	23.4%	16.1%	12.4%	15.5%
QoQ change				4.9%	-6.1%	5.8%	8.3%		-0.6%	1.5%	8.0%	13.3%		2.4%	2.5%	4.0%	6.2%				
Professional Services	0.3	111.2	121.1	31.0	33.6	34.2	34.8	133.7	33.6	35.3	36.0	36.0	140.9	32.9	36.8	37.5	37.9	145.1	148.9	152.7	155.9
YoY change		54.3%	8.9%	10.4%	10.4% 8.4%	10.4% 1.7%	10.4% 1.9%	10.4%	8.3%	4.9% 5.0%	5.3%	3.4% 0.1%	5.4%	-2.2% -8.8%	4.3%	4.2%	5.2% 1.1%	3.0%	2.6%	2.6%	2.0%
QoQ change Total Revenue	16	623.0	705.0	-1.7%	8.4%	197.4	205.8	779.6	-3.0%	2027	21%	217.4	830.8	-8.8%	217.7	20%	230.9	884.3	936.3	993.9	1 070 9
YoY change	1.6	623.0	13.3%	184.8	191.7	197.4	205.8	10.4%	7.7%	5.7%	7.2%	217.A 5.6%	6.6%	211.6	7.4%	<u>224.1</u> 5.9%	230.9	6.4%	5.9%	6.2%	1,0/0.9
Yor change QoQ change		40.4%	13.3%	-0.9%	3.8%	2.9%	4.3%	10.4%	-3.3%	1.8%	4.4%	2.7%	0.0%	-2.6%	2.9%	3.0%	6.2% 3.0%	0.4%	0.9%	0.2%	7.7%
Quyunige	-			-0.9%	3.0%	2.9%	4.370		-3.3%	1.0%	4.470	2.179		12.0%	2.9%	3.0%	3.0%				
Total Cost of Sales	13	168.0	193.6	47.5	50.2	50.6	50.0	198.3	51.7	51.6	51.7	52.4	207.4	53.5	53.8	53.1	54.3	214.6	221.3	229.2	240.6
Gross Profit	0.3	454.9	512.4	137.2	141.5	146.8	155.8	581.3	147.3	151.1	160.0	164.9	623.4	158.2	163.9	171.1	176.6	669.7	715.0	764.7	830.3
Gross margin	20.8%	73.0%	72.6%	74.3%	73.8%	74.4%	75.7%	74.6%	74.0%	74.6%	75.6%	75.9%	75.0%	74,7%	75.3%	76.3%	76.5%	75.7%	76.4%	76.9%	77.5%
Operating Expenses																					
Sales & Marketing	3.1	390.0	361.8	80.5	77.7	76.0	80.4	314.6	80.5	78.2	76.8	82.7	318.2	83.4	81.8	79.1	85.0	329.3	337.1	346.4	360.5
Research & Development	3.9	211.1	214.2	43.7	46.5	49.8	45.9	185.8	51.7	51.0	50.5	49.5	202.7	52.3	52.1	51.2	50.3	205.9	206.3	207.2	210.2
General & Administration	2.2	90.6	91.679	20.3	20.1	22.0	20.0	82.5	20.9	18.4	18.5	19.0	76.8	21.1	18.7	18.5	18.9	77.2	77.0	76.8	77.4
Special Charges	-	270.93	266.55	58.69	54.12	71.78	68.74	253.32	55.03	52.04	50.59	61.02	218.68	58.58	54.68	52.80	66.82	232.88	262.38	303.46	356.57
Total Operating Expenses	9.1	691.7	667.7	144.5	144.4	147 7	146.3	582.9	153.0	147.6	145.8	151.2	597.7	156.9	152.6	148.8	154.2	612.4	620.5	630.4	648.0
YoY change	2.1	19.8%	-3.5%	-24.2%	-17.7%	-9.8%	6.3%	-12.7%	5.9%	2.2%	-1.3%	3.4%	2.5%	2.5%	3.3%	2.1%	1.9%	2.5%	1.3%	1.6%	2.8%
Operating Income	(8.8)	(236.7)	(155.3)	(7.3)	(2.9)	(1.0)	9.6	(1.6)	(5.7)	3.5	14.2	13.7	25.7	1.3	11.3	22.3	22.4	57.3	94.5	134.3	182.3
Operating Marpin	-535.2%	-38.0%	-22.0%	-3.9%	-1.5%	-0.5%	4.6%	-0.2%	-2.9%	1.7%	6.7%	6.3%	3.1%	0.6%	5.2%	9.9%	9.7%	6.5%	10,1%	13.5%	17.0%
YoY change		-14 3%	-34.4%	.89.6%	.94.3%	.97.2%	.7499.4%	.99.0%	-21.5%	.219.9%	.1586.7%	43.3%	.1742.9%	.123.1%	223.1%	57.3%	63.6%	123.3%	64.9%	42.2%	35.7%
EBITDA	(8.8)	(171.8)	(104.9)	4.3	8.7	10.1	19.4	42.5	4.1	13.1	23.6	28.2	68.9	14.3	22.5	32.2	36.0	105.0	137.6	173.9	220.3
EBITDA Margin Net Interest and Other Income (Expense)	-535.2%	-27.6% (10.2)	-14.9% (8.8)	2.3%	4.5% (1.0)	5.1% (0.7)	9.4%	5.5% (2.9)	2.0%	6.4%	11.1% (0.4)	13.0%	8.3%	6.7% (2.4)	10.3% (2.4)	14.4% (2.4)	15.6%	11.9% (9.5)	14.7%	17.5%	20.6%
Net Interest and Other Income (Expense)	0.0	(10.2)	(8.8)	(0.8)	(1.0)	(0.7)	(0.4)	(29)	(0.4)	(1.7)	(0.4)	(2.4)	(4.9)	(2.4)	(2.4)	(2.4)	(2.4)	(9.5)	(9.5)	(9.5)	(9.5)
Provision (Benefit) for Income Taxes	(0.01)	1.26	3.12	1.29	0.97	1.13	1.25	4.63	1.44	1.31	1.88	1.88	6.50	1 90	193	1.95	1.98	7.75	8.15	8.55	8.95
% Tax Rate	(0.01)	-0.5%	-1.9%	-16.1%	-24.6%	-68.8%	1.25	-104.9%	.23.7%	72.9%	1.88	1.88	6.50 31.2%	-178.9%	21.6%	9.8%	1.98	16.2%	8.15	6.9%	5.95
Net income	(8.74)	(248.2)	(167.2)	(9.3)	(4.9)	(2.8)	7.9	(9.0)	(7.5)	0.5	11.9	9.5	14.3	(3.0)	7.0	17.9	18.1	40.0	76.8	116.2	163.8
Net margin	-532.4%	-39.8%	-23.7%	-5.0%	-2.5%	-1.4%	3.8%	-1.2%	-3.8%	0.2%	5.6%	4.3%	1.7%	-1.4%	3.2%	8.0%	7.8%	4.5%	8.2%	11.7%	15.3%
Pro Forma EPS - Operating	(\$0.09)	(\$1.61)	(\$1.02)	(\$0.05)	(\$0.03)	(\$0.02)	\$0.04	(\$0.05)	(\$0.04)	\$0.00	\$0.06	\$0.05	\$0.07	(\$0.02)	\$0.04	\$0.09	\$0.09	\$0.20	\$0.36	\$0.53	\$0.72
Year over year % change	(20.03)	NM	NM NM	NM NM	NM NM	IM	NM	NM	NM NM	NM	NM	14.3%	IM	IM	1283.1%	46.1%	82.3%	177.1%	77.8%	46.2%	36.4%
ESOs Expense, net of tax		1.46	1.23	0.30	0.28	0.40	0.19	1.90	0.28	0.05	0.16	0.21	0.59	0.72	0.18	0.20	0.25	0.83	1.02	1.22	1.44
EPS, net of ESOs, after tax (Modelware)	(\$0.09)	(\$3.07)	(\$2.26)	(\$0.35)	(\$0.31)	(\$0.41)	(\$0.14)	(\$1.95)	(\$0.32)	(\$0.05)	(\$0.10)	(\$0.16)	(\$0.51)	(\$0.74)	(\$0.14)	(\$0.11)	(\$0.17)	(\$0.62)	(\$0.66)	(\$0.69)	(\$0.72)
Weighted avg. common shares (Basic)	100.0	154.1	163.2	172.2	176.6	179.7	182.3	177.7	186.5	189.7	192.4	193.7	190.5	194.9	196.8	198.7	200.6	197.7	205.1	212.3	219.4
Diluted Shares Outstanding (Operating)	100.0	154.1	163.2	172.2	176.6	179.7	190.0	179.6	186.5	198.0	199.6	199.0	195.8	194.9	204.6	206.6	208.6	203.7	213.3	220.8	228.2
Dilution Ratio	100%	100%	100%	100%	100%	100%	104%	101%	100%	104%	104%	103%	103%	100%	104%	104%	104%	103%	104%	104%	104%
Period end basic shares outstanding	1	159.4	170.3	177.8	182.0	184.2	187.1	182.8	191.9	192.9	193.4	193.9	193.0	195.8	197.7	199.6	201.5	198.7	206.0	213.2	220.3
Change in EOP shares (QoQ)	1		I	3.2	4.2	2.2	2.9		4.8	1.0	0.5	0.5		1.9	1.9	1.9	1.9				1

Source: Company Data, Morgan Stanley Research

#### Exhibit 10: FEYE: Balance Sheet

(\$ in millions, except EPS)						ĺ					1					ſ				
			147	2017				3/18	2018					2019						<u> </u>
taarta	FY15	FY16	2/17	6/17	9/17	12/17	FY17	3/18	6/18	9/18	12/186	FY18E	3/196	6/19E	9/19E	12/19E	FY19E	FY20E	FY21E	F
ash and cash equivalents	402.1	222.7	163.4	154.4	192.8	180.9	100.9	167.9	251.4	297.3	435.3	425.3	497.3	472.1	510.6	591.8	591.8	721.5	962.2	1.2
itort-Term investments	767.8	712.1	711.6	719.4	718.0	715.9	715.9	718.5	724.0	691.0	691.0	691.0	691.0	991.0	691.0	691.0	691.0	691.0	691.0	1
Accounts Receivables. Net	172.8	122.7	111.0	116.7	128.2	146.2	146.3	102.1	120.9	129.2	157.9	157.9	111.1	121.0	122.7	175.4	175.4	184.7	196.7	
Accounts Receivables, Net	1/2.8	133.7	6.2	5.8	5.4	146.3	146.3	102.1	6.7	9.1	157.9	157.9	6.1	131.6	5.9	1/5.4	1/5.4	5.0	196.7	
Inventories Deferred Costs of Revenue, Current Portion	13.7	6.0	0.2	5.8	5.4	5.7	5.7	6.8	9.7	0.1	5.8	2.8	0.1	5.9	5.9	5.8	5.8	5.8	5.9	
Prepaid Espenses and Other Current Assets	20.9	14.6	89.6	95.0	94.0	92.8	93.8	102.9	92.0	97.5	91.6	91.0	109.2	98.8	109.7	105.4	106.4	123.9	121.0	
Prepaid Expenses and Other Corrent Assets Total Current Assets	1,387,3	1,159.9	1.001.0	1.089.2	1,106.9	1.142.7	1.142.7	1.02.9	1,295.6	1.321.1	1.281.7	1,281.7	1384.8	1.400.4	1.444.9	1.549.4	1.540.4	123.9	1.977.4	2.
otal Current Assets	1,387.3	1,159.9	1,001.0	1,089.2	1,106.9	1,142.7	1,142.7	1,099.1	1,295.6	1,221.1	1,241.7	1,281.7	1,314.8	1,400.4	1,444.9	1,549.4	1,540.4	1,726.9	1,977.4	- 2.
Deferred Costs of Revenue, Non Current	-					-	-									-	-	-		
Property and Equipment, Net	78.4	61.9	60.8	60.1	67.1	71.4	71.4	76.6	81.4	86.3	82.1	82.1	75.9	71.6	60.6	62.1	62.1	48.2	29.7	
Goodwill	750.3	978.3	978.3	978.3	978.3	984.7	984.7	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	
Intangible Assets	214.6	244.0	229.2	214.5	199.7	187.4	187.4	180.9	169.2	155.6	143.6	143.6	135.6	127.6	119.6	111.5	111.5	90.2	76.0	
Other Noncurrent Assets	11.0	82.0	76.3	71.7	69.8	72.8	72.0	69.9	69.4	74.1	77.5	77.5	74.3	74.0	78.8	82.5	82.5	87.4	92.8	
Total Assets	2,441.5	2,526.1	2,426.4	2,412.7	2,421.8	2,458.8	2,458.8	2,426.4	2,614.5	2,626.9	2,684.8	2,684.8	2,670.4	2,673.4	2,711.8	2,795.5	2,786.5	2,952.6	3,185.7	2,4
Liabilities																				
Accounts Payable	42.7	20.3	25.5	27.9	32.5	35.7	35.7	30.7	22.3	21.9	37.0	27.0	21.6	22.5	22.6	37.9	37.9	28.2	29.2	
Accrued Liabilities	29.8	23.0	22.1	20.4	22.1	19.6	19.6	23.8	20.5	28.0	18.9	18.9	19.0	19.1	19.2	19.3	19.2	19.6	19.9	
Accrued Compensation	79.3	96.0	50.1	50.1	59.1	59.6	59.6	54.0	58.4	64.0	67.1	67.1	67.0	65.6	60.0	69.7	48.7	69.6	70.8	
Long-term Debt, Current	-	-				-					-	-				-	-	-	-	
Proceeds from Early Exercise of Options	-	-				-					-	-				-	-	-	-	
Deferred Revenue, Current	305.2	508.7	498.7	498.7	512.5	546.6	546.6	533.5	525.6	528.8	550.3	\$50.3	539.6	532.3	\$40.5	573.6	\$73.6	604.1	656.3	
Total Current Liabilities	457.9	648.0	596.3	\$97.1	626.1	661.5	661.5	642.1	626.8	652.6	673.3	672.3	657.2	651.5	661.2	699.6	699.6	721.6	786.2	1
ong-term Debt, less current portion	705.2	742.0	751.2	760.5	770.0	779.6	779.6	789.3	929.4	950.9	950.9	950.9	950.9	950.9	950.9	950.9	950.9	950.9	950.9	
Deferred Revenue, Long-Term	221.8	419.0	369.3	271.2	362.9	363.5	263.5	352.6	253.9	258.4	373.0	373.0	365.8	361.5	366.4	288.8	388.8	409.5	444.8	
Preferred Stock Warrant Liability	-	-				-	-				-	-		10.7		-	-	-	-	
Other Liabilities	11.1	7.1	8.3	15.4	15.2	22.1	22.1	23.0	23.8	24.1	24.3	24.3	30.5		30.9	31.0	31.0	34.1	41.4	
fotal Liabilities	1,397.1	1,016.1	1,745.1	1,744.2	1,774.2	1,826.6	1,826.6	1,007.0	1,954.0	1,986.1	2,021.5	2,021.5	2,004.4	1,994.7	2,009.4	2,070.3	2,070.3	2,128.1	1,121.1	2,
Convertible Preferred Stock	-					-						-				-	-	-	-	
Common Stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	
Additional Paid-In Capital	2,403.1	2,682.9	2,731.1	2,797.6	2,834.7	2,891.4	2,891.4	2,952.1	3,065.0	3,104.5	3,168.5	3,169.5	3,232.0	3,293.1	3,351.6	3,424.1	3,424.1	3,708.0	4,022.0	4,
Freasury Stock	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	(150.0)	
Votes Receivable From Stockholders	-	-					-					-				-	-	-	-	1 1
	(1,208.7)	(1,822.9)	(1,899.8)	(1,998.1)	(2,037.2)	(2,109.2)	(2,109.2)	(2,182.7)	(2,254.5)	(2,303.6)	(2,355.2)	(2,355.2)	(2,416.7)	(2,464.4)	(2,499.3)	(2,549.0)	(2,548.0)	(2,723.6)	(2,920.8)	(2
Retained Earnings (Accumulated Deficit)													999.1							1.
Retained Earnings (Accumulated Deficit) Fotal Stockholders' Equity	1,044.4	710.0	681.3	669.4	647.6	632.2	632.2	619.4	660.4	650.9	663.3	662.3		678.8	702.4	726.2	726.2	824.6	962.4	

Source: Company Data, Morgan Stanley Research

#### Exhibit 11: FEYE: Cash Flow Statement

(\$ in millions, except EPS)				2017		ſ			2018	_	Γ			2019	_	1				
	FY15	FY16	3/17	6/17	9/17	12/17	FY17	3/18	6/18	9/18	12/18E	FY18E	3/19E	6/19E	9/19E	12/19E	FY19E	FY20E	FY21E	FY22E
Net Income	(539.2)	(482.3)	(77.2)	(68.3)	(69.2)	(70.4)	(285.2)	(71.8)	(72.9)	(50.0)	(51.6)	(246.3)	(61.5)	(47.7)	(34.9)	(48.8)	(192.8)	(185.6)	(187.2)	(192.7)
Depreciation and Amortization Stock Compensation Expenses	112.0 222.4	119.3 199.1	26.4 43.9	26.4 39.4	25.8 42.2	24.8 40.8	103.4 166.3	22.4 42.1	22.2 38.9	22.1 37.3	26.5 49.0	93.2 167.4	21.0 50.6	19.2 46.7	18.0 44.8	21.6 58.8	79.8 200.9	64.5 241.0	53.9 289.2	47.5 347.1
Change in the Fair Value of Preferred Warrants Loss of Disposal of PP&E Release of Deferred Tax Allowance	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0
Other Non-Cash Charge	23.4	36.0	11.6	10.6	10.8	10.4	43.4	11.0	(21.3)	12.8	0.0	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Changes in Working Capital Accounts Receivable Inventories Prepaid Expenses, Other Assets	218.5 19.1 (7.8) (0.7)	111.2 61.8 1.4 9.3	(21.6) 22.0 (1.1) 0.6	(19.6) (5.8) 0.5 (2.1)	2.9 (12.0) (1.3) 5.0	27.9 (18.6) (1.4) 1.8	(10.4) (14.4) (3.3) 5.4	5.5 43.0 (1.4) (6.3)	(11.2) (18.1) (0.9) 11.2	(0.3) (8.9) (1.9) (7.9)	9.4 (28.7) 0.3 2.5	3.4 (12.8) (3.9) (0.5)	15.0 46.8 (0.3) (14.3)	(19.2) (20.6) 0.3 10.8	2.9 (2.1) (0.0) (9.7)	12.9 (41.7) 0.1 (6.5)	11.5 (17.5) (0.0) (19.8)	26.1 (9.3) 0.0 (22.3)	80.0 (12.0) (0.1) (3.1)	109.1 (5.9) (0.1) (5.9)
Deferred Cost of Revenue Accounts Payable Accound Liability Accound Compensation	0.0 7.7 7.5 14.4	0.0 (19.1) (11.2) (24.6)	0.0 3.3 (0.9) (7.0)	0.0 0.5 (1.7) 0.1	0.0 (4.8) 1.7 9.0	0.0 7.0 (2.7) 0.5	0.0 6.0 (3.7) 2.6	0.0 (5.4) 4.3 (5.6)	0.0 1.2 (3.3) 4.4	0.0 (2.5) 7.5 5.6	0.0 5.1 (9.1) 3.1	0.0 (1.5) (0.7) 7.5	0.0 (5.4) 0.1 (0.1)	0.0 1.9 0.2 (1.4)	0.0 (0.8) 0.1 3.2	0.0 5.3 0.1 (0.1)	0.0 0.9 0.5 1.7	0.0 0.4 0.3 0.9	0.0 1.0 0.3 1.1	0.0 6.1 0.6 2.0
Deferred Revenue Other Liabilities Net Cash Provided by (used in) Operating Activities	174.5 3.7 37.0	(24.0) 105.4 (11.9) (16.8)	(39.8) 1.2 (17.0)	(18.1) 7.1 (11.5)	5.5 (0.2)	34.8 6.6 33.6	(17.6) 14.7 17.6	(24.0) 0.9 9.2	(6.6) 0.9 (44.3)	7.6	36.1 0.2 33.4	13.2 22 20.2	(17.8) 6.2 25.0	(10.6) 0.3 (10.0)	12.1 0.2 30.8	55.5 0.1 44.5	39.1 6.7 99.3	51.2 5.1 146.1	87.6 5.3 235.9	104.8 7.6 311.0
				. ,					. ,					. ,						
Acquistion of Business, Net of Cash Acquired Purchase of PP&E	0.0 (54.5)	0.0 (36.3)	0.0 (8.5)	0.0 (8.8)	0.0 (8.6)	(4.3) (17.9)	(4.3) (43.8)	(6.0) (14.5)	0.0 (12.2)	0.0 (10.4)	0.0 (10.4)	(5.9) (47.4)	0.0 (6.7)	0.0 (6.9)	0.0 (7.0)	0.0 (7.1)	0.0 (27.7)	0.0 (29.3)	0.0 (31.1)	0.0 (33.3)
Proceeds from Sale of Investments Lease Denosits	(521.0) (1.2)	(153.2) (0.1)	(0.2)	(5.6) (0.1)	(2.2)	(2.8)	(10.8) (0.5)	(4.8) (0.1)	(5.0)	33.3 0.2	0.0	23.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Cash Provided by (used in) Investing Activities	(576.7)	(189.7)	(8.7)	(14.5)	(11.1)	(25.0)	(59.3)	(25.3)	(17.0)	23.2	(10.4)	(29.6)	(6.7)	(6.9)	(7.0)	(7.1)	(27.7)	(29.3)	(31.1)	(33.3)
Proceeds from Line of Credit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payment of Line of Credit Proceeds / Repayment from Term Debt	0.0	0.0 (10.0)	0.0 (38.9)	0.0	0.0	0.0	0.0 (38.9)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Proceeds / Repayment of Growth Loan Issuance of Series F Preferred Stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Issuance of Series F Preferred Stock Stock Options Exercised Before Vesting	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 31.4	0.0	0.0	0.0	0.0	0.0	0.0 43.0	0.0	0.0
Repurchase of Common Stock Recomment of Notes Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Cash Provided by (used in) Financing Activities	795.5	25.8	(34.6)	17.0	5.0	11.5	(1.1)	3.1	244.8	0.9	15.0	263.8	13.7	13.7	13.7	13.7	54.8	43.0	35.8	30.5
Exchange Rate Impact	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in Cash and Cash Equivalents	255.7	(178.4)	(60.3)	(8.9)	6.4	20.1	(42.8)	(13.0)	183.5	45.9	38.0	254.4	32.0	5.8	37.5	51.2	126.5	159.7	240.7	308.2
Cash, beginning of Period	146.4	402.1	223.7	163.4	154.4	160.8	223.7	180.9	167.9	351.4	397.3	180.9	435.3	467.3	473.1	510.6	435.3	561.8	721.5	962.2
Cash, end of Period	402.1	223.7	163.4	154.4	160.8	180.9	180.9	167.9	351.4	397.3	435.3	435.3	467.3	473.1	510.6	561.8	561.8	721.5	962.2	1,270.4

Source: Company Data, Morgan Stanley Research

**UPDATE** 

UPDATE

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	COVERAGE UI	NIVERSE	INVESTMEN	T BANKING CLIE	ENTS (IBC)	OTHER MA INVESTMENT : CLIENTS (	SERVICES
STOCK RATING	COUNT	% OF	COUNT	% OF	% OF	COUNT	% OF
CATEGORY		TOTAL		TOTAL IBC	RATING		TOTAL
				(	CATEGORY		OTHER
							MISC
Overweight/Buy	1156	37%	295	40%	26%	541	38%
Equal-weight/Hold	1405	44%	342	47%	24%	641	45%
Not-Rated/Hold	46	1%	7	1%	15%	7	0%
Underweight/Sell	555	18%	85	12%	15%	226	16%
TOTAL	3,162		729			1415	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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Price Target History: 11/5/15 : 26; 1/19/16 : 21; 2/12/16 : 14; 3/9/16 : 16; 8/5/16 : 15; 2/3/17 : 11; 5/3/17 : 12; 8/2/17 : 13; 9/7/17 : 19; 3/28/18 : 21

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA) Stock Price (Not Covered by Current Analyst) -- Stock Price (Covered by Current Analyst) --Stock and Industry Ratings (abbreviations below) appear as + Stock Rating/Industry View Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA) Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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#### INDUSTRY COVERAGE: Software

Brian Essex, CFA           App Folio Inc (APPE C)         U (9521/2016)         \$61.31           CDK Global Inc (CDKO)         E (0225/017)         \$62.51           Chagg Inc (CHCALN)         E (0225/017)         \$62.51           Debady Inc (CDKO)         E (0225/017)         \$52.52           Debady Inc (CDWN)         O (90/13/2017)         \$52.52           Debady Inc (CDWN)         C (90/13/2017)         \$52.52           MNDBODYNC (MEO)         E (90/22/016)         \$54.52           Paralesight Inc. (PSO)         C (90/02/2016)         \$54.53           Sabaré Cong (SABR O)         E (04/02/016)         \$54.53           Sabaré Cong (SABR O)         E (04/02/016)         \$54.53           SS&C Technologies Holdings, Inc. (SSNC.O)         C (04/27/2018)         \$54.63           SAdasian Congration PLC (TEANO)         E (03/20/218)         \$84.03           Atabasis CFA         Xatassian Congration PLC (TEANO)         E (03/20/218)         \$84.03           Atabasian Congration PLC (TEANO)         E (03/20/218)         \$84.03           Atabasian Congration PLC (TEANO)         E (04/20/218)         \$84.03           Atabasian Congration PLC (TEANO)         E (04/12/2017)         \$10.32           Intuit (MTUO)         U (01/13/2016)         \$20.91	COMPANY (TICKER)	RATING (AS OF)	PRICE* (12/12/2018)
CDK Global Inc (CDK O)         E (0203/2017)         \$48.64           Chegg Inc (CHGSN)         E (021/12/2017)         \$66.31           Endurance International Group Holdings, Inc. (EIGLO)         U (021/2017)         \$66.31           Endurance International Group Holdings, Inc. (EIGLO)         U (021/2017)         \$86.32           Instructure International Group Holdings, Inc. (EIGLO)         U (021/2017)         \$83.21           Instructure International Group Holdings, Inc. (EIGLO)         U (08/12/2018)         \$24.74           Q2 Holdings Inc (GTWON)         E (09/28/2016)         \$160.09           State Core (SABR.O)         E (04/06/2017)         \$24.95           Shonpi (Inc. (IS+OP.N)         E (09/10/2016)         \$160.09           SS&C Technologies Holdings, Inc. (SSNC.O)         O (04/27/2018)         \$46.19           Travelport Workwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA              Adobe Systems (ADBE.O)         E (09/10/2010)         \$245.55            Autobes (IOSK-O)         D (00/12/2018)         \$86.03            Autobes (IOSK-O)         E (09/10/2010)         \$245.55            Autobes (IOSK-O)         E (09/10/2010)         \$245.55	Brian Essex, CFA		
Chegq Inc (CHG3N)         E (02252016)         \$2267           Ellie Mein (CELLIN)         E (01/122017)         \$66.31           Endurance International Group Holdings, Inc. (EIGLO)         U (0221/2017)         \$52.65           Gobady Inc (GDDYN)         C (05/11/2015)         \$52.55           INNDBGOVINC (MS.O)         C (05/022016)         \$24.74           MNDBGOVINC (MS.O)         E (09/022016)         \$49.92           RealPage Inc (RPO)         C (01/222016)         \$49.92           RealPage Inc (RPO)         E (09/022016)         \$16.03           Saber Corn (SABR.O)         E (09/022016)         \$16.03           Staber Corn (SABR.O)         E (09/022016)         \$46.19           Travelport Worldwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA           \$46.19           Adbes Systems (ADBE.O)         E (09/10/2010)         \$245.55           Adbes Systems (ADBE.O)         E (09/10/2017)         \$16.0	AppFolio Inc (APPF.O)	U (05/21/2018)	\$61.31
Elle Wae inc (ELLIN)         E (01/122017)         \$66.31           Endurance International Group Holdings, Inc. (EIGLO)         U (022/12017)         \$82.29           Gobaddy Inc (GDDYN)         O (05/11/2015)         \$65.22           Instructure Inc (NSTN)         O (09/18/2017)         \$38.321           MNDBCDY INC (MB O)         E (09/28/2015)         \$25.60           Pluralsight Inc. (PS O)         O (01/29/2018)         \$44.74           Q2 Holdings Inc (CTWON)         E (07/22/2016)         \$49.92           Sabre Corp (SABR O)         E (01/02/2016)         \$46.19           Stabre Corp (SABR O)         E (00/10/2016)         \$46.19           Stabre Corp (SABR O)         E (00/10/2016)         \$46.51           Stabre Corp (SABR O)         E (00/10/2016)         \$46.53           Stabre Corp (SABR O)         E (00/10/2016)         \$46.53           Stabre Corp (SABR O)         E (00/10/2016)         \$46.53           Travelport Worldwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA           \$40.02           Adobe Systems (ADBEO)         E (09/10/2016)         \$245.55           Aradosians (ADBEC)         E (00/10/2017)         \$10.32           Alabasian Corporation (PCC TEAMO)         D (01/18/20		E (02/03/2017)	
Endurance International Group Holdings, Inc. (EIGLO)         U (022112017)         \$8.29           GoDaddy Inc (GDDYN)         O (051112015)         \$6522           Instructure Inc (INSTN)         O (09182017)         \$38.21           MNDBCOVINC (M6 O)         E (09282016)         \$255.60           Pluralsight Inc. (PS.O)         O (08022018)         \$24.74           02 Holdings Inc (GTWON)         E (077222016)         \$49.92           Sabre Corp (SABR.O)         E (09282016)         \$160.09           SS&C Technologies Holdings, Inc. (SSNC.O)         O (04272018)         \$46.19           Travelport Worldwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA             Adobe Systems (ADBE.O)         E (09102010)         \$245.55           Adamai Technologies Inc. (AKMO)         E (03292018)         \$86.05           Audoes (ADSKC)         O (05012017)         \$137.79           Check Point Software Technologies Ltd. (CHKP-O)         E (04182017)         \$108.74           Othodes (ADSKC)         O (01132016)         \$20.98         \$40.92           Audoes Systems (no (CRCLN)         O (01132016)         \$10.92         \$110.32           Instit (MTU-D)         U (011492016)         \$10.92         \$110.32      <			
GoDaddy Inc (GDDYN)         Construction         C (05/11/2015)         \$65.22           Instructure Inc (INSTN)         C (09/14/2017)         \$38.21           MNDBODY INC (MB C)         E (09/24/2016)         \$24.74           Q2 Holdings Inc (CTWCN)         E (07/22/2016)         \$349.92           RealPage Inc (PP O)         C (01/22/2016)         \$49.92           Store Corp (SABR C)         E (04/06/2017)         \$24.93           SS&C Technologies Holdings, Inc. (SSNC.O)         C (04/27/2018)         \$46.19           Travelport Worldwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA           Adobe Systems (ADBE O)         E (09/10/2010)         \$245.55           Adatessin Corporation PLC (TEANO)         E (109/202010)         \$245.55           Adatessin Corporation PLC (TEANO)         E (100/42/218)         \$44.05           Atlassian Corporation PLC (TEANO)         E (04/18/2017)         \$110.32           Intuit (INTU-O)         U (01/13/2016)         \$209.18           Morosoft (MSFT-O)         C (04/18/2017)         \$110.874           Chrix Systems Inc (CTXS.O)         U (01/13/2016)         \$209.18           Morosoft (MSFT-O)         C (01/13/2016)         \$109.90           Crace Corporation (CRCL.N)         C (1			
Instructure Inc (INST N)         O (09/18/2017)         \$38.21           IMNDBOOV INC (MB O)         E (09/28/2016)         \$25.60           Puralsight Inc (PS O)         O (08/02/2018)         \$24.74           Q2 Holdings Inc (OTMON)         E (07/22/2018)         \$34.99.22           RealPage Inc (RP O)         O (01/29/2018)         \$51.53           Sabre Corp (SARR.O)         E (04/06/2017)         \$24.99           Stack Technologies Holdings, Inc. (SSNC.O)         O (04/27/2018)         \$46.19           Travelport Workdwed Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA           \$40.92           Adobe Systems (ADBE-O)         E (09/10/2010)         \$245.55           Adobe Systems (ADBE-O)         E (09/10/2010)         \$245.55           Adobe Systems (ADBE-O)         E (09/10/2018)         \$84.05           Autodesk (ADSK.O)         O (05/01/2017)         \$1137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$10.32           Intuit (NTU.O)         U (09/13/2016)         \$209.18           Moresoft (NEST-O)         O (01/13/2016)         \$10.92           Palo Alto Networks Inc (PAWW)         O (10/11/2016)         \$110.32           Intuit (NTU.O) <td< td=""><td></td><td></td><td></td></td<>			
Pluralisight Inc. (FS.O)         O (08022018)         \$24.74           02 Holdings Inc (GTVON)         E (07722016)         \$49.92           RealPage Inc (RP.O)         O (01729/2018)         \$51.53           Sabre Corp (SABR.O)         E (0406/2017)         \$24.99           Sabre Corp (SABR.O)         E (0406/2017)         \$46.19           Travelport Worldwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA           Adole Systems (ADBE.O)         E (09/10/2010)         \$245.55           Akamai Technologies, Inc. (AKANO)         E (09/10/2010)         \$245.55           Attodes (ADSK.O)         O (05001/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$108.74           Citrix Systems Inc (CTXS.O)         U (011/19/2016)         \$110.32           Intuit (INTU.O)         U (031/2016)         \$209.18           Moresoft (MSFT.O)         O (01/10/2017)         \$189.52           Palo Alto Networks Inc (PANW.N)         O (101/0/2017)         \$189.52           Red Hat, Inc (RHTN)         ++         \$176.74           Statesforce acom (CRNN)         O (08/07/2016)         \$109.09           Oracle Corporation (ORCL.N)         O (010/0/2017)         \$189.52			\$38.21
Q2 Holdings Inc (QPVON)         E (077222016)         \$49.92           RealPage Inc (RP-O)         O (07292018)         \$51.53           Sabre Corp (SMBR O)         E (0406/2017)         \$24.99           SS&C Technologies Holdings, Inc. (SSNC.O)         O (04/27/2018)         \$46.19           Traveiport Worldwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA             Adobe Systems (ADBE.O)         E (09/10/2010)         \$245.55           Armai Technologies, Inc. (AKAMO)         E (03/29/2018)         \$86.03           Atlassian Corporation PLC (TEXMO)         E (100/42018)         \$84.05           Autodesk (ADSK.O)         O (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/13/2016)         \$209.18           Moresoft (MSET.O)         O (01/13/2016)         \$100.92         \$100.92           Oracle Corporation (CRCL.N)         O (01/13/2016)         \$100.90         \$47.32           Palo Alto Networks Inc (PANWN)         O (100/20217)         \$137.79           Keithau, Inc. (RHT.N)         ++         \$176.74           Salesforce.com (CRMN)         O (09/13/2016)         \$209.18           Morasott (MSET.O)         E (10/10/2017)         \$227.57			
RealPage Inc (RP-O)         O (01/29/2018)         \$51:53           Sabre Corp (SABR.O)         E (04/06/2017)         \$24:99           SS&C Technologies Holdings, Inc. (SSNC.O)         O (04/27/2018)         \$46:19           Travelport Worldwide Limited (TVPT.N)         ++         \$15:75           Keith Weiss, CFA           Adobe Systems (ADBE.O)         E (09/10/2010)         \$245:55           Akamai Technologies, Inc. (KAMO)         E (03/29/2018)         \$86:03           Atabassian Corporation PLC (TEAMO)         E (10/04/2018)         \$84:05           Autodesk (ADSK.O)         O (05/01/2017)         \$137:79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$108:74           Citrix Systems Inc (CTSS.O)         U (09/13/2016)         \$209:18           Macrosoft (MSFT.O)         O (01/13/2016)         \$109:08           Oracle Corporation (CRCL N)         O (01/02/2018)         \$47:32           Palo Alto Networks Inc (PAWMN)         O (03/8/2011)         \$140:09           ServiceNow Inc (NOWN)         O (03/8/2013)         \$176:64           Symantec (SYMC O)         E (04/10/2017)         \$222:75           Workday Inc (WDAY-O)         O (01/10/2017)         \$22:75           Workday Inc (WDAY-O)         E (02/17/2			
Sabre Corp (SABR.C)         E1(04/06/2017)         \$224.99           Shopif(Inic (SHOP.N))         E1(09/202016)         \$160.09           SS&C Technologies Holdings, Inc. (SSNC.O)         0 (04/27/2018)         \$46.19           Travelport Worldwide Limited (TVPTN)         ++         \$15.75           Keith Weiss, CFA           Adobe Systems (ADBE.O)         E (09/10/2010)         \$245.55           Akamai Technologies, Inc. (AKANO)         E (03/29/2018)         \$88.03           Atlassian Corporation PLC (TEANO)         E (100/42018)         \$84.05           Autodesk (ADSK.O)         O (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/19/2016)         \$209.18           Moresoft (MSET.O)         U (01/13/2016)         \$209.18           Moresoft (MSET.O)         O (01/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/19/2016)         \$109.08           Oracle Corporation (CRCL.N)         O (01/01/2018)         \$47.32           Palo Alto Networks Inc (PANWN)         O (10/10/2017)         \$123.75           Kuare Inc (MMN)         O (05/23/2011)         \$140.09           Symantec (SYMC.O)         E (10/10/2017)         \$22.75           Workday Inc (WDAY.O)         <			
SS8C Technologies Holdings, Inc. (SSNC.O)         O (04/27/2018)         \$46.19           Travelport Worldwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA         E (09/10/2010)         \$245.55           Akamai Technologies, Inc. (AKAMO)         E (03/29/2018)         \$86.03           Atlassian Corporation PLC (TEAMO)         E (10/4/2018)         \$84.05           Autodesk (ADSK.O)         O (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/10/2016)         \$209.18           Mcrosoft (MSFT.O)         O (01/13/2016)         \$209.18           Mcrosoft (MST.O)         O (01/13/2016)         \$109.08           Oracle Corporation (ORCL.N)         O (00/13/2018)         \$47.32           Palo Alto Networks Inc (PANWN)         O (05/022011)         \$140.09           Symantec (SYMC.O)         E (09/10/2017)         \$227.55           Metissa Franchi         E         E           Box Inc (BOXN)         O (00/272018)         \$15.33           CyberArk Software Ltd (CYBR.O)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK O)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK O)         E (02/27/2018)         \$15.33           OyderArk Software Ltd (CYBR.			
Travelport Worldwide Limited (TVPT.N)         ++         \$15.75           Keith Weiss, CFA            Adobe Systems (ADBE O)         E (09/10/2010)         \$245.55           Akamai Technologies, Inc. (AKANO)         E (03/29/2018)         \$86.03           Atladesk (ADSK.O)         E (1004/2018)         \$84.05           Autodesk (ADSK.O)         C (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$108.74           Citrix Systems Inc (CTXS.O)         U (09/13/2016)         \$209.18           Intuit (INTU-O)         U (09/13/2016)         \$109.08           Oracle Corporation (ORCL.N)         O (01/13/2016)         \$109.08           Oracle Corporation (ORCL.N)         O (01/13/2016)         \$109.08           Statist (INTU-O)         U (09/13/2018)         \$47.32           Palo Alto Networks Inc (PAWNN)         O (01/10/2017)         \$122.275           Ware Inc (MWNN)         O (05/23/2011)         \$140.09           Symantice (SYMC:O)         E (00/10/2017)         \$22.75           Ware Inc (MDAYO)         O (09/18/2013)         \$165.22           Melissa Franchi         E (02/17/2015)         \$19.24           BoxInc (BOXN)         E (00/12/2017)         \$22.75	Shopify Inc (SHOP.N)	E (09/28/2016)	\$160.09
Keith Weiss, CFA           Adobe Systems (ADBE.O)         E (09/10/2010)         \$245.55           Akamai Technologies, Inc. (AKAMO)         E (03/29/2018)         \$86.03           Atlassian Corporation PLC (TEAMO)         E (10/4/2018)         \$84.05           Autodesk (ADSK.O)         O (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/12/2018)         \$84.05           Intuit (INTU.O)         U (09/13/2016)         \$109.08           Mcrosoft (MSFT.O)         O (01/13/2016)         \$109.08           Oracle Corporation (CRCL.N)         O (01/10/32/2016)         \$109.08           Oracle Corporation (CRCL.N)         O (01/10/32/2016)         \$110.93           Patio Alto Networks Inc (PANWN)         O (01/10/32/2016)         \$110.93           Symanteic (SYMC.O)         E (01/10/2017)         \$22.75           Medissa Franchi         E         E           Box Inc (BOXN)         C (05/23/2011)         \$114.00           Symantein Inc (MMVN)         O (09/18/2013)         \$165.52           Melissa Franchi         E         E         E           Box Inc (BOXN)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$77.62 <td< td=""><td></td><td></td><td></td></td<>			
Adobe Systems (ADBE.O)         E (09/10/2010)         \$245.55           Akamai Technologies, Inc. (AKAMO)         E (03/29/2018)         \$68.03           Atlassian Corporation PLC (TEAMO)         E (10/04/2018)         \$84.05           Autodesk (ADSKO)         O (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$108.74           Check Point Software Technologies Ltd. (CHKP.O)         U (01/13/2016)         \$109.08           Mcrosoft (MSFT:O)         O (01/13/2016)         \$109.08           Oracle Corporation (ORCL.N)         O (01/03/2018)         \$47.32           Palo Atto Networks Inc (PANW.N)         O (10/10/2017)         \$189.52           Red Hat, Inc. (RHT.N)         ++         \$176.74           Salesforce.com (CRMN)         O (09/23/2011)         \$140.09           ServiceNow Inc (NOWN)         O (09/23/2013)         \$187.64           Symantec (SYMC.O)         E (10/10/2017)         \$22.75           Ware Inc (MWN)         O (09/27/2018)         \$15.53           Carbon Black Inc (CBLK.O)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (10/10/2018)         \$15.52           ProeEye Inc (FEYE.O)         E (12/13/2018)         \$17.62           FireEye	Travelport Worldwide Limited (TVP1.N)	++	\$15.75
Akamal Technològies, Inć. (AKAMO)         E (03/29/2018)         \$68.03           Atlassian Corporation PLC (TEAMO)         E (10/04/2018)         \$84.05           Autodesk (ADSK.O)         O (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$108.74           Chitx Systems Inc (CTSS.O)         U (09/13/2016)         \$209.18           Intuit (INTU.O)         U (09/13/2016)         \$10.92           Oracle Corporation (ORCL.N)         O (10/10/2017)         \$189.52           Red Hat, Inc. (RHTN)         ++         \$176.74           Salesforce.com (CRMN)         O (05/23/2011)         \$140.09           ServiceNow linc (NOWNN)         O (00/17/25/2016)         \$162.62           Workday linc (WDAY.O)         E (02/17/2015)         \$19.24           Carbon Black linc (CBLK.O)         E (02/17/2015)         \$19.24           Carbon Black linc (CBLK.O)         E (02/17/2015)         \$19.24           Carbon Black linc (FFCO)         E (11/21/2017)         \$26.75           ForeScout Technologies linc (FSCT.O)         E (11/21/2017)         \$26.79           Forinet Inc. (RHTN.O)         E (04/10/2018)         \$77.62           FireEye Inc (FEYE.O)         E (04/10/2018)         \$77.52           Fireeye	Keith Weiss, CFA		
Akamai Technològies, Inć. (AKAMO)         E (03/29/2018)         \$68.03           Atlassian Corporation PLC (TEAMO)         E (10/04/2018)         \$84.05           Autodesk (ADSK.O)         O (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$108.74           Citrix Systems Inc (CTSX.O)         U (09/13/2016)         \$209.18           Intuit (INTU.O)         O (01/13/2016)         \$10.92           Oracle Corporation (ORCL.N)         O (01/10/2017)         \$189.52           Red Hat, Inc. (RHT.N)         ++         \$176.74           Salesforce.com (CRMN)         O (05/23/2011)         \$140.09           ServiceNow Inc (NOWNN)         O (00/17/25/2016)         \$162.62           Workday Inc (WDAY.O)         E (02/17/2015)         \$19.24           Carbon Black Inc (CELK.O)         E (02/17/2015)         \$19.24           Carbon Black Inc (CELK.O)         E (02/17/2015)         \$19.24           Carbon Black Inc (FFCT.O)         E (11/2/2017)         \$26.79           Foriestout Technologies Inc (FSCT.O)         E (11/2/2017)         \$26.79           ForeScout Technologies Inc (FSCT.O)         E (04/10/2018)         \$77.62           FirreEye Inc (FEYE.O)         E (04/10/2018)         \$75.51	Adobe Systems (ADBE.O)	E (09/10/2010)	\$245.55
Autodesk (ADSK-O)         O (05/01/2017)         \$137.79           Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$108.74           Chirk Systems Inc (CTXS.O)         U (01/19/2016)         \$209.18           Intuit (INTU-O)         U (09/13/2016)         \$209.18           Microsoft (MSET-O)         O (01/03/2016)         \$109.08           Oracle Corporation (ORCL.N)         O (01/03/2018)         \$47.32           Paio Alto Networks Inc (PANWN)         O (10/01/02/07)         \$189.52           Red Hat, Inc. (RHT.N)         ++         \$176.74           Salesforce.com (CRMN)         O (09/18/2013)         \$187.64           Symantec (SYMC.O)         E (10/10/2017)         \$22.75           VMware Inc (MWN)         O (00/725/2016)         \$162.62           Workday Inc (WDAY.O)         O (00/10/2018)         \$165.52           Melissa Franchi         \$19.24         Carbon Black Inc (CBLK.O)         E (02/17/2015)         \$19.24           Carbon Black Inc (FBCT.O)         E (10/10/2018)         \$15.53         CyberArk Software Ltd (CYBR.O)         O (09/27/2018)         \$17.62           FireEye Inc (FEYE.O)         E (10/11/2017)         \$26.679         \$77.62         \$19.24           ForeScout Technologies Inc (FSCT.O)         E (10/11/2018)			
Check Point Software Technologies Ltd. (CHKP.O)         E (04/18/2017)         \$108.74           Citrix Systems Inc (CTXS.O)         U (01/19/2016)         \$110.32           Intuit (INTU.O)         U (09/13/2016)         \$209.18           Mcrosoft (MSFT.O)         O (01/03/2018)         \$47.32           Paio Alto Networks Inc (PANWN)         O (10/10/2017)         \$189.52           Paio Alto Networks Inc (PANWN)         O (05/23/2011)         \$141.00           ServiceNow Inc (NOWN)         O (05/23/2011)         \$141.00           ServiceNow Inc (NOWN)         O (00/23/2018)         \$127.67           Symantec (SYNC.O)         E (10/10/2017)         \$22.75           Workday Inc (WDAY.O)         O (07/25/2016)         \$165.52           Melissa Franchi         \$165.52           Melissa Franchi         \$19.24           Back Inc (CBLKO)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLKO)         E (02/2018)         \$17.33           Cyber Ark Software Ltd (CYBR.O)         O (09/27/2018)         \$17.62           FireEye Inc (FEYE.O)         E (12/12/2017)         \$26.79           ForeScout Technologies Inc (FSCT.O)         E (10/10/2018)         \$75.59           Imperva Inc. (INPVO)         E (04/10/2018)         \$17.57 <tr< td=""><td></td><td></td><td></td></tr<>			
Cirix Systems Inc (CTXS.O)         U (01/13/2016)         \$110.32           Intuit (INTU.O)         U (09/13/2016)         \$209.18           Mcrosoft (MSFT.O)         O (01/13/2016)         \$109.08           Oracle Corporation (ORCL.N)         O (01/13/2016)         \$109.08           Palo Alto Networks Inc (PANWIN)         O (10/10/2017)         \$189.52           Pado Alto Networks Inc (NOWN)         O (05/23/2011)         \$140.09           ServiceNow Inc (NOWN)         O (09/18/2013)         \$187.64           Symantec (SYMC.O)         E (10/10/2017)         \$22.75           WWare Inc (WMVN)         O (07/25/2016)         \$162.62           Workday Inc (WDAY.O)         O (01/10/2018)         \$165.52           Melissa Franchi         E         \$19.24           Box Inc (BOXN)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (02/17/2018)         \$17.52           FireEye Inc (FEYE.O)         E (11/21/2017)         \$22.67           ForeScout Technologies Inc (FSCT.O)         E (11/21/2017)         \$22.67           Fortinet Inc. (FTNT.O)         E (04/10/2018)         \$75.59           Imperva Inc. (IMPV.O)         E (10/10/2017)         \$22.75           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$9	AUTODESK (ADSK.U) Check Point Software Technologies Ltd. (CHKP.O)		
Intuit (I\TU_O)         U (09/13/2016)         \$209.16           Mcrosoft (MSFT.O)         O (01/13/2016)         \$109.08           Oracle Corporation (CRCL.N)         O (01/03/2018)         \$47.32           Palo Alto Networks Inc (PANW.N)         O (101/02/017)         \$189.52           Red Hat, Inc. (RHT.N)         ++         \$176.74           Salesforce.com (CRNN)         O (05/23/2011)         \$140.09           ServiceNow Inc (NOW.N)         O (09/18/2013)         \$187.64           Symantec (SWC.O)         E (10/10/2017)         \$22.75           Wdware Inc (NOW.N)         O (07/25/2016)         \$162.62           Workday Inc (WDAY.O)         O (01/10/2018)         \$165.52           Melissa Franchi         E         \$102/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$17.62           FireEye Inc (FEYE.O)         E (11/21/2017)         \$26.79           ForeScout Technologies Inc (FSCT.O)         E (11/21/2017)         \$26.79           Forotinet Inc. (FINT.O)         E (04/10/2018)         \$77.52           Imperva Inc (IMPV.O)         E (04/10/2018)         \$75.19           Imperva Inc (IMPV.O)         E (04/10/2018)         \$75.19           Imperva Inc (SPLK.O)         E (09/11/2018)		(	
Oracle Corporation (ORCL.N)         O (01/03/2018)         \$47.32           Palo Alto Networks Inc (PANW.N)         O (100/2017)         \$189.52           Red Hat, Inc. (RHTN)         ++         \$176.74           Salesforce.com (CRMN)         O (05/23/2011)         \$140.09           ServiceNow Inc (NOW.N)         O (09/18/2013)         \$187.64           Symantec (SWC.O)         E (01/10/2017)         \$22.75           Wdware Inc (NOW.N)         O (07/25/2016)         \$162.62           Workday Inc (WDAY.O)         O (01/10/2018)         \$176.52           Melissa Franchi         E         (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (02/2018)         \$175.32           Cyber Ark Software Ltd (CYBR.O)         O (09/27/2018)         \$77.62           FireEye Inc (FEYE.O)         E (11/21/2017)         \$22.679           ForeScout Technologies Inc (FSCT.O)         E (10/11/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$75.52           Proofpoint Inc (FPT.O)         E (08/10/2017)         \$84.08           Qualys Inc (QLYS.O)         E (08/11/2017)         \$84.19           Rapid T Inc (RPD.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Inc (SALLN)		U (09/13/2016)	\$209.18
Palo Alto Networks Inc (PANŴN)         O (10/10/2017)         \$189.52           Red Hat, Inc. (RHT.N)         ++         \$176.74           Salesforce.com (CRMN)         O (05/23/2011)         \$140.09           ServiceNow Inc (NOW.N)         O (09/18/2013)         \$187.64           Symantec (SYMC.O)         E (10/10/2017)         \$22.75           Wdware Inc (MWNN)         O (07/25/2016)         \$162.62           Workday Inc (WDAY.O)         O (01/10/2018)         \$165.52           Melissa Franchi         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$15.33           Cyber/Ark Software Ltd (CYBR.O)         O (09/27/2018)         \$17.62           FireEye Inc (FEYE.O)         E (11/21/2017)         \$26.79           ForeScout Technologies Inc (FSCT.O)         E (10/11/2018)         \$75.19           Imperva Inc. (INPV.O)         E (10/11/2018)         \$75.19           Imperva Inc. (ICPT.O)         E (08/11/2015)         \$33.80           Qualys Inc (QLYS.O)         E (10/10/2017)         \$84.33           Qualys Inc (SPLK.O)         E (08/20/2018)         \$17.07           Secureworks Corp (SCWXO)         E (10/10/2018)         \$17.07           Secureworks Corp (SCWXO)         E (08/20/2017)			
Red Hat, Inc. (RHT.N)         G (05/23/2011)         \$140.09           ServiceNow Inc (NOWN)         O (05/23/2011)         \$140.09           ServiceNow Inc (NOWN)         O (09/18/2013)         \$187.64           Symantec (SYMC.O)         E (10/10/2017)         \$22.75           Wkware Inc (VMWN)         O (07/25/2016)         \$162.62           Workday Inc (WDAY.O)         O (01/10/2018)         \$165.52           Melissa Franchi         \$15.33         \$15.33           CyberArk Software Ltd (CYBR.O)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         E (12/13/2018)         \$15.52           ForeScout Technologies Inc (FSCT.O)         E (11/21/2017)         \$26.79           Fortinet Inc. (FTNT.O)         E (04/10/2018)         \$75.19           Imperva Inc. (INPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/02/2017)         \$26.03           Rapid7 Inc (RPD.O)         E (08/11/2015)         \$33.60           SallPoint Technologies Holdings Inc (SALL.N)         E (12/10/2017)         \$25.03           Secureworks Corp (SCWX.O)         E (08/20/2017)         \$109.40           Tenable Holdings Inc (TENB.O) <t< td=""><td></td><td></td><td></td></t<>			
Salesforce.com (CRMN)         O (05/23/2011)         \$140.09           ServiceNow Inc (NOW.N)         O (09/18/2013)         \$187.64           Symantec (SYMC.O)         E (10/10/2017)         \$22.75           Wdware Inc (VMW.N)         O (07/25/2016)         \$162.62           Workday Inc (WDAY.O)         O (01/10/2017)         \$22.75           Melissa Franchi         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         O (09/27/2018)         \$77.62           FireEbye Inc (FEYE.O)         E (12/13/2018)         \$19.52           ForeScout Technologies Inc (FSCT.O)         E (10/10/2017)         \$26.79           Fortinet Inc. (FTNT.O)         E (04/10/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Inc (SAL.N)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (10/02/2017)         \$25.03           Secureworks Corp (SCWXO)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (WRNS.O)         E (08/			
Symantec (SYNC.O)         E (10/10/2017)         \$22.75           VMware Inc (WMWN)         O (07/25/2016)         \$162.62           Workday Inc (WDAY.O)         O (01/10/2018)         \$165.52           Melissa Franchi         E         E         (02/17/2015)         \$19.24           Box Inc (BOXN)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         D (09/27/2018)         \$77.62           FireEye Inc (FEYE.O)         E (11/21/2017)         \$26.79           ForeScout Technologies Inc (FSCT.O)         E (10/11/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$75.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         E (08/11/2017)         \$25.03           Secureworks Corp (SCWXO)         E (10/10/2017)         \$81.09           Splunk Inc (SPLK.O)         E (10/202017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (04/10/2018)         \$27.03           Varonis Systems, Inc. (		O (05/23/2011)	
VMware Inc (VMW/N)         O (07/25/2016)         \$162.62           Workday Inc (WDAY.O)         O (01/10/2018)         \$165.52           Melissa Franchi         E (02/17/2015)         \$19.24           Box Inc (BOXN)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         E (12/13/2018)         \$17.62           FireEye Inc (FEYE.O)         E (11/21/2017)         \$26.79           ForeScout Technologies Inc (FSCT.O)         E (10/11/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (00/10/2015)         \$34.33           Qualys Inc (QLYS.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Holdings Inc (SAIL.N)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (10/02/2017)         \$25.03           Secureworks Corp (SCWX.O)         E (10/02/2017)         \$25.03           Varonis Systems, Inc. (VRNS.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (04/10/2018)         \$41.22           Meta A Marshall         \$84 Inc (EGHT.N)         E (04/10/2018)         \$41.22			
Workday Inc (WDAY.O)         O (01/10/2018)         \$165.52           Melissa Franchi         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         O (09/27/2018)         \$77.62           FireEye Inc (FEYE.O)         E (12/13/2018)         \$19.24           ForeScout Technologies Inc (FSCT.O)         E (12/13/2018)         \$77.62           ProreScout Technologies Inc (FSCT.O)         E (10/11/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (04/10/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (08/11/2015)         \$33.60           Qualys Inc (QLYS.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Holdings Inc (SAIL.N)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (08/20/2018)         \$27.03           Secureworks Corp (SCWX.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall         \$88 Inc (EGHT.N)         E (04/11/2017)         \$44.04			
Box Inc (BOXN)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         O (09/27/2018)         \$77.62           FireEye Inc (FEYE.O)         E (12/13/2018)         \$19.52           ForeScout Technologies Inc (FSCT.O)         E (11/21/2017)         \$26.79           Fortinet Inc. (FTNT.O)         E (04/10/2018)         \$77.519           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (12/12/2017)         \$25.03           Secureworks Corp (SCWXO)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (04/10/2018)         \$41.22           Meta A Marshall         \$28 Inc (EGHT.N)         E (04/10/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			
Box Inc (BOXN)         E (02/17/2015)         \$19.24           Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         O (09/27/2018)         \$77.62           FireEye Inc (FEYE.O)         E (12/13/2018)         \$19.52           ForeScout Technologies Inc (FSCT.O)         E (11/21/2017)         \$26.79           Fortinet Inc. (FTNT.O)         E (04/10/2018)         \$77.519           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (12/12/2017)         \$25.03           Secureworks Corp (SCWXO)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (04/10/2018)         \$41.22           Meta A Marshall         \$28 Inc (EGHT.N)         E (04/10/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04	Melissa Franchi		
Carbon Black Inc (CBLK.O)         E (05/29/2018)         \$15.33           CyberArk Software Ltd (CYBR.O)         O (09/27/2018)         \$77.62           FireEye Inc (FEYE.O)         E (12/13/2018)         \$19.52           ForeScout Technologies Inc (FSCT.O)         E (11/21/2017)         \$26.79           Fortinet Inc. (FINT.O)         E (04/10/2018)         \$77.519           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/11/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (10/2017)         \$25.03           Secureworks Corp (SCWXO)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (10/02/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall         \$28 Inc (EGHT.N)         E (04/10/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04		E (02/17/2015)	\$10.24
CyberArk Software Ltd (CYBR.O)         O (09/27/2018)         \$77.62           FireEye Inc (FEYE.O)         E (12/13/2018)         \$19.52           ForeScout Technologies Inc (FSCT.O)         E (11/12/2017)         \$26.79           Fortinet Inc. (FTNT.O)         E (04/10/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/11/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (10/11/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (12/12/2017)         \$25.03           Secureworks Corp (SCWXO)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (10/02/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall           8x8 Inc (EGHT.N)         E (04/11/2017)         \$44.04			
ForeŠcout Technologies Inc (FSCT.O)         E (11/21/2017)         \$26.79           Fortinet Inc. (FTNT.O)         E (04/10/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Holdings Inc (SAIL.N)         E (12/12/2017)         \$25.03           Secureworks Corp (SCWX.O)         E (10/10/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (10/20217)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall           &x8 Inc (EGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			\$77.62
Fortinet Inc. (FTNT.O)         E (04/10/2018)         \$75.19           Imperva Inc. (IMPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Holdings Inc (SAIL.N)         E (12/10/2017)         \$25.03           Secureworks Corp (SCWX.O)         E (10/02/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall         \$41.22           %x8 Inc (EGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			
Imperva Inc. (IMPV.O)         E (10/11/2018)         \$55.52           Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Holdings Inc (SAIL.N)         E (12/12/2017)         \$25.03           Secureworks Corp (SCWXO)         E (10/02/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall           8x8 Inc (EGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			
Proofpoint Inc (PFPT.O)         O (09/10/2015)         \$94.33           Qualys Inc (QLYS.O)         E (10/10/2017)         \$81.09           Rapid7 Inc (RPD.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Holdings Inc (SAIL.N)         E (12/12/2017)         \$25.03           Secureworks Corp (SCWXO)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (10/02/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall           8x8 Inc (EGHT.N)         E (04/11/2017)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			
Rapid7 Inc (RPD.O)         E (08/11/2015)         \$33.60           SailPoint Technologies Holdings Inc (SAIL.N)         E (12/12/2017)         \$25.03           Secureworks Corp (SCWXO)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (10/02/2017)         \$09.40           Tenable Holdings Inc (TENB.O)         E (08/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22			
SailPoint Technologies Holdings Inc (SAIL.N)         E (12/12/2017)         \$25.03           Secureworks Corp (SCWXO)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (10/02/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall           8x8 Inc (EGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04	Qualys Inc (QLYS.O)	( ,	
Secureworks Corp (SCWXO)         E (12/10/2018)         \$17.07           Splunk Inc (SPLK.O)         E (10/02/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall           8x8 Inc (EGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			
Splunk Inc (SPLKO)         E (10/02/2017)         \$109.40           Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall           8x8 Inc (EGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			
Tenable Holdings Inc (TENB.O)         E (08/20/2018)         \$27.03           Varonis Systems, Inc. (VRNS.O)         E (06/21/2017)         \$58.16           Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22             Meta A Marshall         Strain (FGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			
Zscaler Inc (ZS.O)         E (04/10/2018)         \$41.22           Meta A Marshall	Tenable Holdings Inc (TENB.O)	E (08/20/2018)	
8x8 Inc (EGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04			
8x8 Inc (EGHT.N)         O (01/17/2018)         \$19.54           Five9 Inc (FIVN.O)         E (04/11/2017)         \$44.04	Mote A Merchell		
Five9 lnc (FIVN.Ó) E (04/11/2017) \$44.04		O (01/17/2019)	¢10 54
RingCentral Inc (RNG.N) E (07/19/2017) \$86.59	RingCentral Inc (RNG.N)	E (07/19/2017)	\$86.59

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Appian Corp (APPN.O) Cloudera Inc (CLDR.N) Domo Inc (DOMO.O) MongoDB Inc (MDB.O) New Relic Inc (MEWR.N) NICE Ltd. (NICE.O) Nuance Communications Inc. (NUAN.O) Pivotal Software Inc (PVTL.N) Solarwinds Corp (SWI.N) Tableau Software (DATA.N)	U (01/11/2018) ++ O (07/24/2018) E (11/13/2017) E (05/08/2018) O (11/02/2017) O (05/15/2018) E (11/13/2018) E (02/08/2016)	\$29.22 \$12.64 \$21.19 \$89.06 \$87.24 \$112.99 \$15.22 \$18.25 \$18.66 \$128.83
Stan Zlotsky, CFA		
Anaplan Inc (PLAN.N)	E (11/06/2018)	\$25.67
Coupa Software Inc (COUP.O)	E (10/31/2016)	\$65.17
DocuSign Inc (DOCU.O)	E (05/22/2018)	\$42.40
HubSpot, Inc. (HUBS.N)	E (01/29/2018)	\$136.10
SendGrid Inc (SEND.N)	++	\$46.61
Smartsheet Inc (SMAR.N)	O (05/22/2018)	\$24.50
Veeva Systems Inc (VEEV.N)	O (01/29/2018)	\$92.04
Workiva Inc (WK.N)	U (09/18/2018)	\$36.86
Yext Inc (YEXT.N)	E (05/08/2017)	\$15.71
Zendesk, Inc (ZEN.N)	O (09/10/2015)	\$60.61
Zuora Inc (ZUO.N)	E (05/07/2018)	\$18.72

Stock Ratings are subject to change. Please see latest research for each company. \* Historical prices are not split adjusted.

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