



HIGH TOUCH
INVESTOR RELATIONS

Short Surveillance Case Study

Laura Kiernan, CEO & Founder, IRC, CPA
High Touch Investor Relations

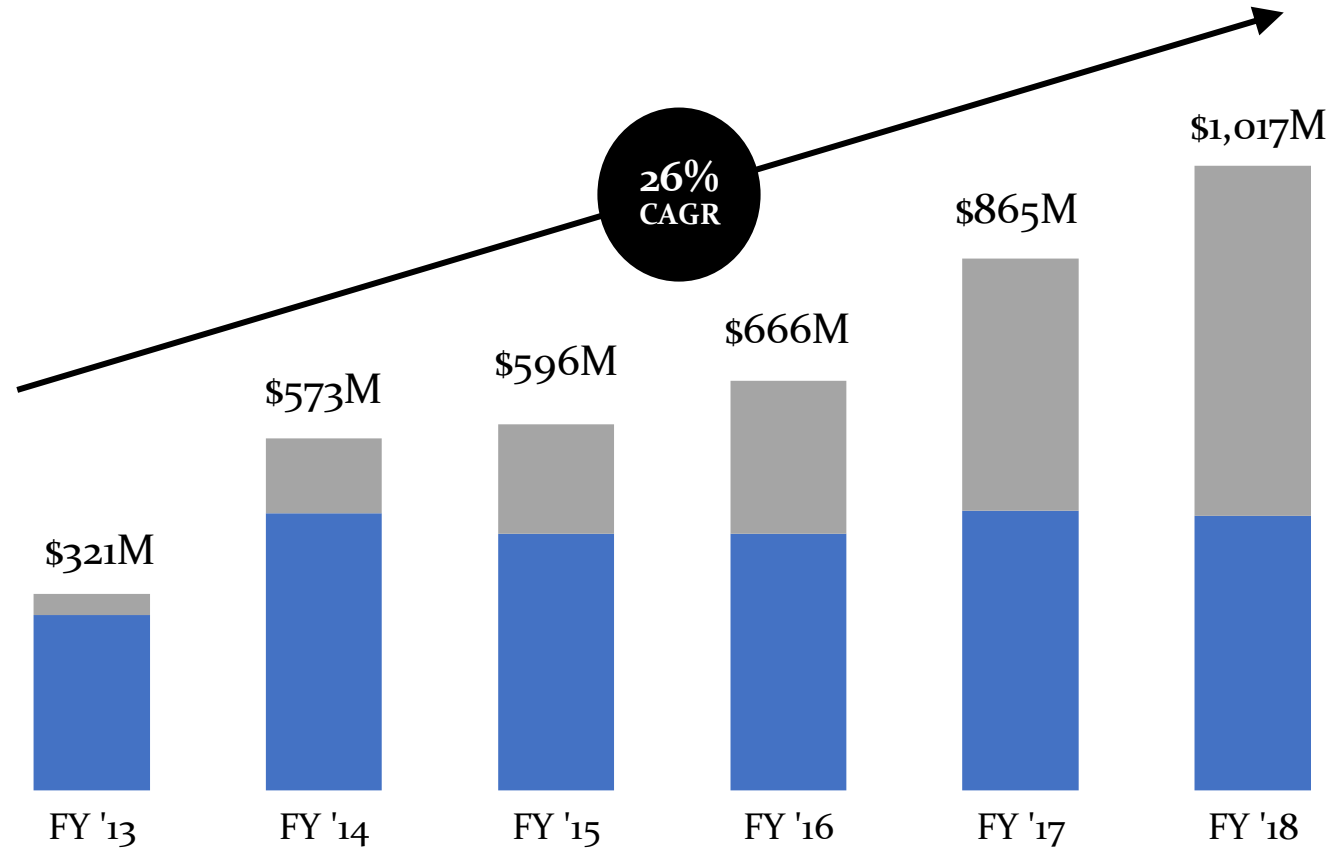
XYZ IR “Get Shorty” Case Study

- XYZ fundamentals are strong and continue to support investment thesis
- XYZ strategies have created value – though there is still opportunity to achieve fair value
- Short interest has declined approximately 50% from 10 million shares to 5 million shares –there is still room to reduce short interest

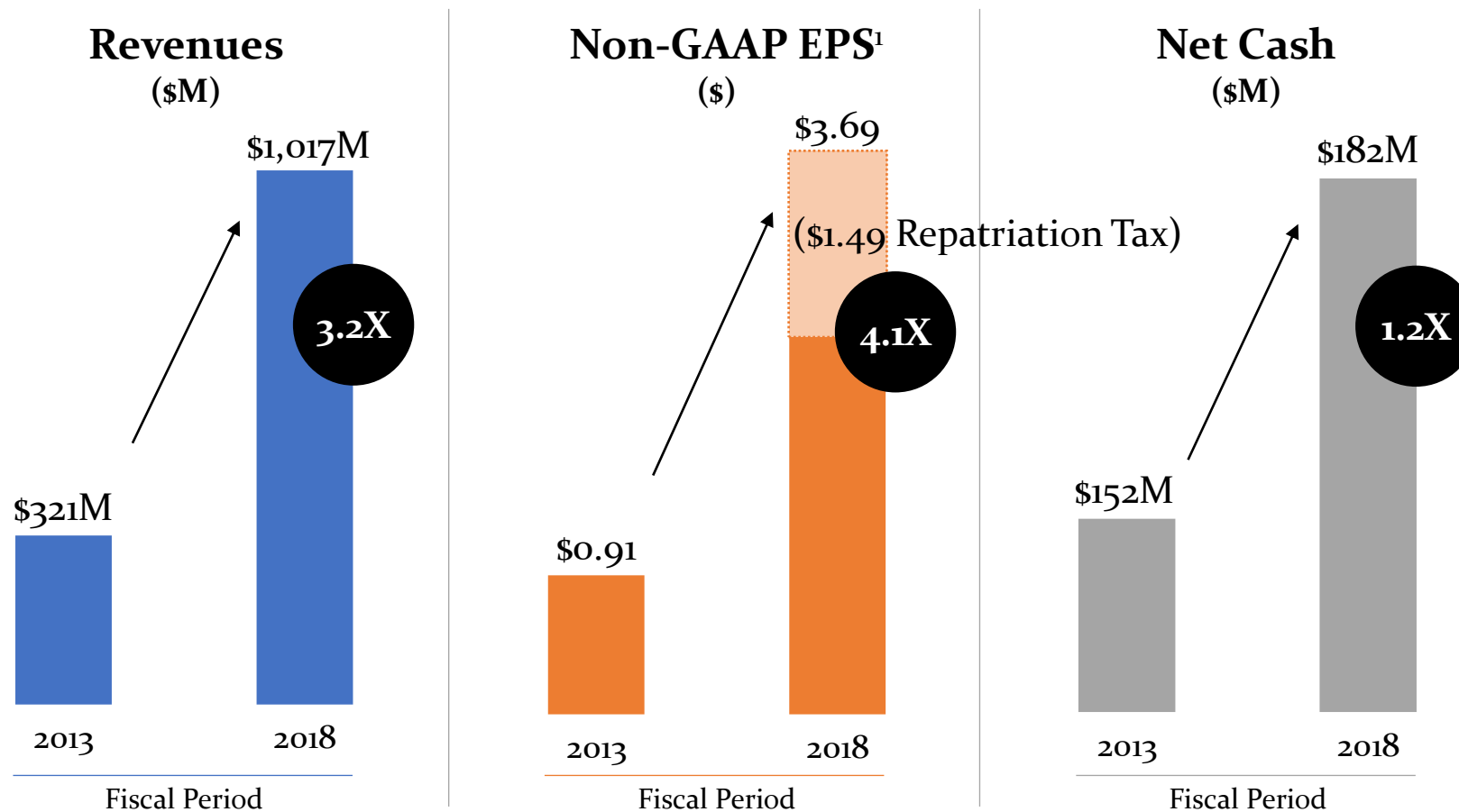
Fundamentals Strong & Support Investment Thesis

- Consistent high revenue growth in growing markets
- An unusual combination of highly profitable results – unique for technology hardware sector
- Continuing to gain market share in key markets
- Investor screens place XYZ at the top of the list for ROIC and other measures. While valuation has improved, it still has opportunity to grow significantly higher

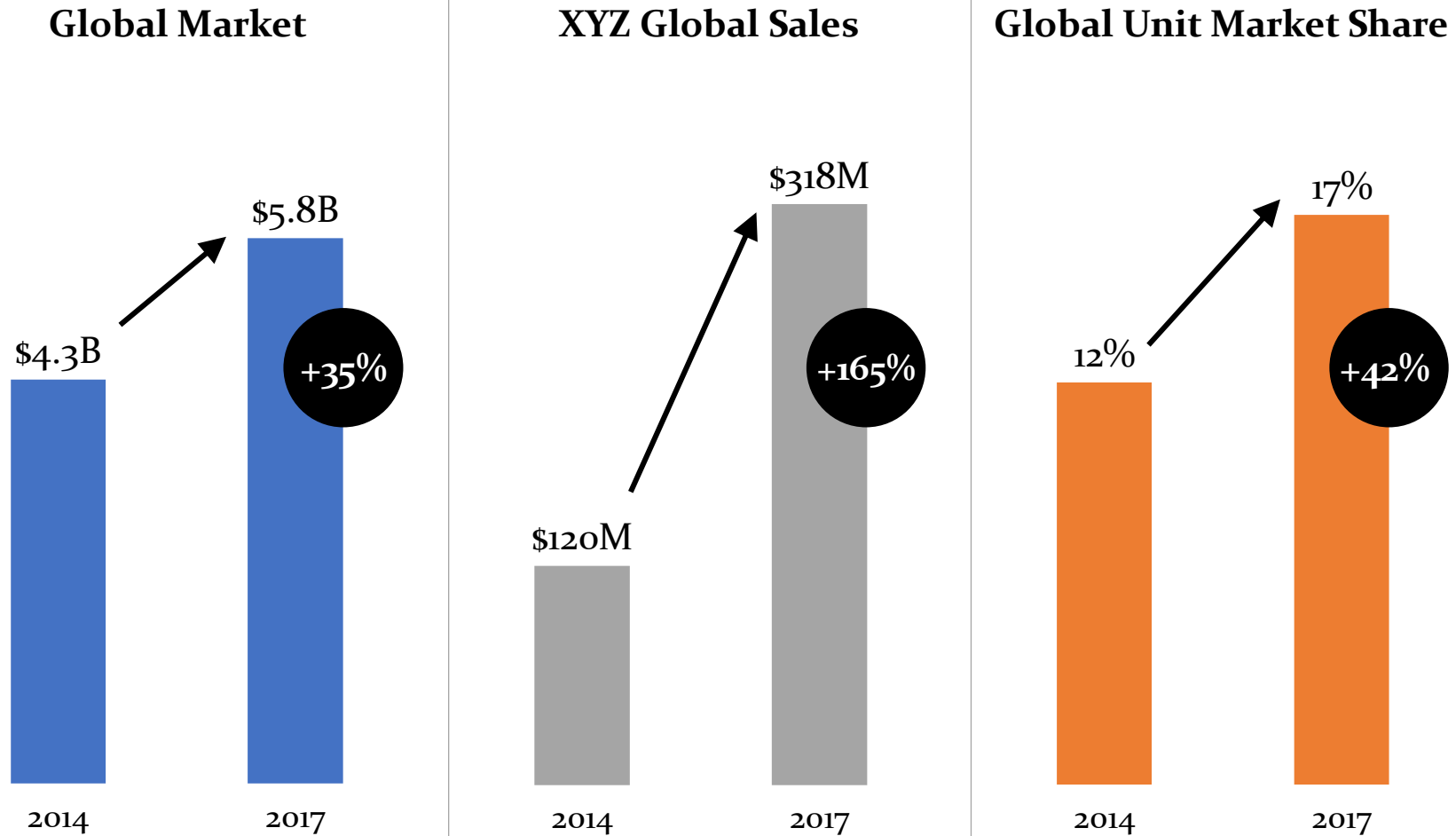
Successful Revenue Growth in Targeted Markets



Results: An Unusual Combination – Disruptive Model + Highly Profitable



Gaining Market Share



XYZ Key Metrics Versus Sector¹ Strong

Ticker	LTM Sales/Employee millions	LTM Gross Margin %	Operating Expense to Sales Ratio (%)	LTM Op. Margin %	3 Year Avg. Operating Income Margin (%)	LTM Net Income Margin %	Next 12 Months PE Ratio	Next 12 Months PE/Growth Ratio
XYZ	\$ 1.2	44%	12%	32%	34%	30%	19	1.1
CSCO	\$ 0.7	62	37	25	25	22	15	2.0
ANET	\$ 0.9	65	36	9	23	31	35	1.2
JNPR	\$ 0.5	59	44	14	18	13	15	1.4
MSI	\$ 0.4	48	27	19	18	12	18	2.2
BRCD	\$ 0.4	63	52	3	17	11	N/A	N/A
NTGR	\$ 1.4	29	22	3	7	5	N/A	N/A
HPE	\$ 0.4	29	28	2	6	4	11	N/A
FTNT	\$ 0.3	75	67	10	4	6	43	2.1
AVO	\$ 0.3	52	41	11	9	9	N/A	N/A
ARRS	\$ 0.8	28	23	2	3	3	8	2.5
CAMP	\$ 0.4	41	39	2	4	0	18	0.9
INFN	\$ 0.3	35	58	(19)	(7)	(23)	N/A	2.0
ATEN	\$ 0.3	77	84	(6)	(15)	(9)	N/A	N/A
PANW	\$ 0.4	72	83	(8)	(12)	(11)	47	1.5
Average	\$ 0.6	52%	44%	7%	9%	7%	23	1.7

XYZ results clearly outperform competitors on key metrics but still deserve higher valuation multiples

1. The LTM, 3 yr and next 12 month data for sector was sourced from Bloomberg on August 17, 2018. Sector companies include: Arista, Arris, A10, Avigilon, Brocade, CalAmp, Cisco, Fortinet, HPE, Infinera, Juniper, Netgear, Motorola Solutions & Palo Alto Networks.

Consensus Analyst Estimates for XYZ Predict Continued Growth

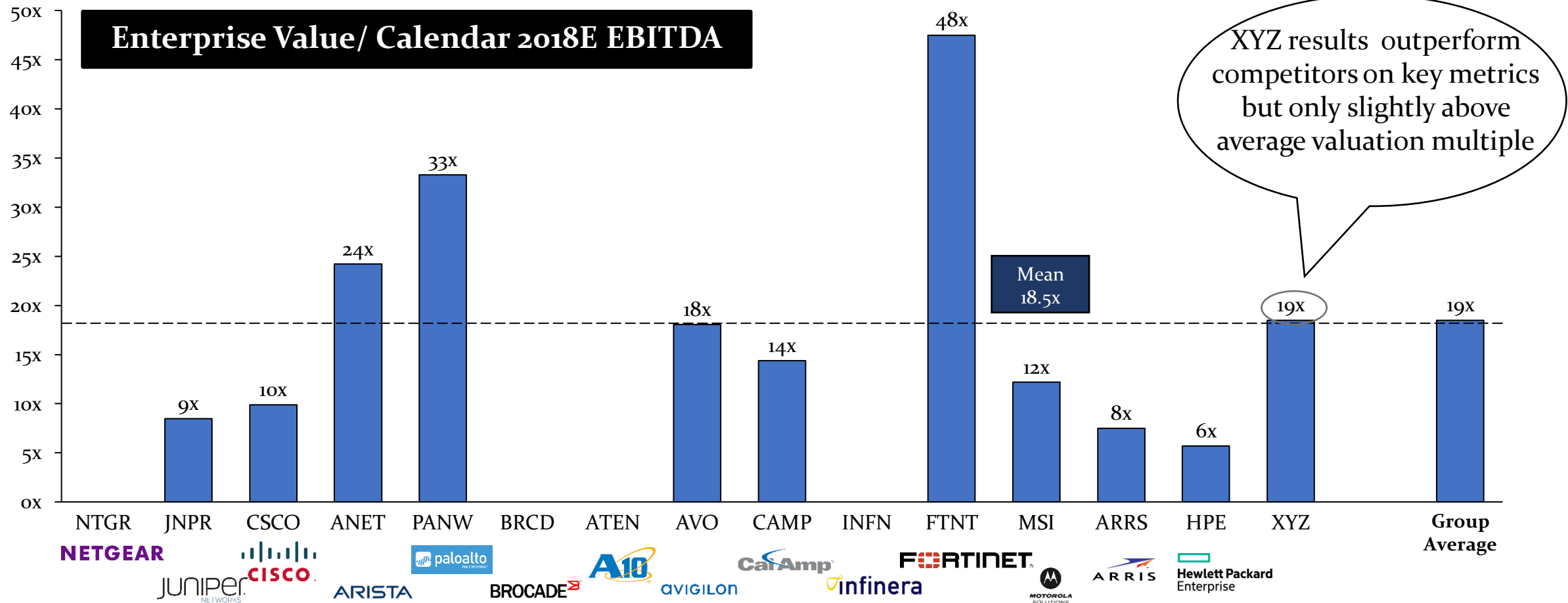
	Period		Annuals			
Measure	06/15	06/16	06/17	06/18E	06/19E	06/20E
EBITDA (M)	151.8	248.3	297.1	342.3	406.7	479.0
EBIT (M)	146.9	242.1	289.8	338.5	401.5	471.0
Sales (M)	NA	666.4	865.3	1,006.8	1,136.8	1,223.0
Net Income Adj (M)	NA	206.5	251.2	291.3	328.8	391.0
EPS	NA	2.41	3.04	3.71	4.42	5.27
P/E	16.6x	16.3x	16.8x	23.7x	19.9x	16.7x
P/S	4.7x	4.9x	4.9x	6.5x	5.7x	5.3x
P/B	6.6x	7.0x	6.9x	18.0x	12.1x	6.4x
Div Yield	0.5%	0.0%	0.0%	0.0%	NA	NA
EV/EBIT	16.6x	11.4x	13.2x	18.7x	15.7x	13.4x
EV/EBITDA	16.1x	11.1x	12.9x	18.5x	15.5x	13.2x
CPS	1.53	2.34	1.38	4.21	4.36	4.36
DPS	0.17	0.00	0.00	0.00	--	--

XYZ IR Strategies Have Created Value – But There is Still Opportunity to Achieve Fair Value

- We've had good success over the past year at *fortifying long-term shareholders and getting out shorts* that are not fundamentally based
- The *success of the analyst and investor day contributed to fortifying the long term shareholder base*
- *Shorts have lost significant amounts of capital* given the increased borrow rate coupled with a significantly higher stock price, while *long-term shareholders have been consistently rewarded* for their continued investment
- Long-term *shareholder base remains “rock-solid”* with management plus top 20 investors owning 100% of the shares outstanding (short interest allows for an additional 5 million shares to be owned by other investors)
- *Strong company performance* (Revenue & Earnings) *on top of share buy-backs* have *enabled XYZ to “recapture” and grow enterprise value*. Most recently, *dividend policy has helped*
- By NOT doing a convertible, and *significantly fortifying the balance sheet* with increased liquidity, and *repatriation of cash*, the company *limited shorts ability to cover* (without moving the market up/squeeze)
- XYZ was *added to the R1000* recently – a very positive sign given our move toward large capitalization. *XYZ to be added to income related indices in December*
- *Shorts remain “boxed in”* given buy-backs and limited float – but that doesn't prevent imbalances that persist on bank books as phantom shares
- *Buying* an insurance policy –to help police banks on persistent imbalances– estimated imbalance is still estimated at 4 million – 5 million shares, especially as lending rate declines (currently below 3%)

Valuation Multiples UP for XYZ vs. Technology Peers EV/EBITDA

XYZ 19X – Up from 13X same time last year



Note: Brocade was acquired, and Infinera, A10 and NetGear's forecasted 2018 EBITDA is negative, so the multiple is not meaningful and has been eliminated from the averages

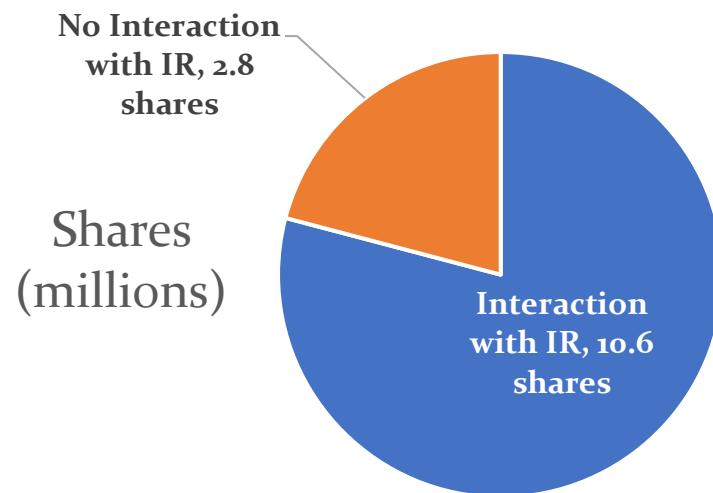
Top 20 Shareholders + Mgmt Own 99% of Equity

Shares Sold Short Provided the Supply for Owner #'s 21-200 with ~6 million shares

Investor	Position	Position Change	Market Value	Ownership	Report Date	Source	Country
CEO	56,245,231	-32,950	4,619,983,274	76.01%	2/12/2018	News	n/a
EDGEPOINT INVESTMENT	3,763,572	-2,002,712	309,139,804	5.09%	6/30/2018	13F	Canada
AKRE CAPITAL MANAGEM	2,680,000	0	220,135,200	3.62%	6/30/2018	13F	United States
VANGUARD GROUP	1,699,982	-281,981	139,636,521	2.30%	6/30/2018	ULT-AGG	United States
DISCIPLINED GROWTH I	1,536,461	-22,513	126,204,907	2.08%	6/30/2018	13F	United States
JACKSON SQUARE PARTN	1,145,776	-16,456	94,114,041	1.55%	6/30/2018	13F	United States
BLACKROCK	1,028,313	-573,413	84,465,630	1.39%	6/30/2018	ULT-AGG	United States
MANAGEMENT	773,206	776	63,511,141	1.04%	7/8/2018	Form 4	n/a
STATE OF TENNESSEE T	730,000	-106,373	59,962,200	0.99%	6/30/2018	13F	United States
DIMENSIONAL FUND ADV	630,684	-79,322	51,804,384	0.85%	6/30/2018	13F	United States
ANCHOR CAPITAL ADVIS	335,486	-21,973	27,556,820	0.45%	6/30/2018	13F	United States
RENAISSANCE TECHNOLO	332,300	29,800	27,295,122	0.45%	6/30/2018	13F	United States
SEI INVESTMENTS CO	327,729	117,287	26,919,660	0.44%	7/31/2018	ULT-AGG	United States
NORGES BANK	316,663	-110,049	26,010,699	0.43%	12/31/2017	13F	Norway
STATE STREET CORP	311,400	-182,026	25,578,396	0.42%	6/30/2018	ULT-AGG	United States
FMR LLC	287,843	-8,643	23,643,424	0.39%	8/16/2018	ULT-AGG	United States
GEODE CAPITAL MANAGE	251,575	7,553	20,664,371	0.34%	6/30/2018	13F	United States
MACQUARIE GROUP	193,684	-16,192	15,909,204	0.26%	6/30/2018	ULT-AGG	Australia
GOLDMAN SACHS GROUP	188,462	97,897	15,480,269	0.25%	6/30/2018	ULT-AGG	United States
MILLENNIUM MANAGEMEN	181,087	181,087	14,874,486	0.24%	6/30/2018	13F	United States

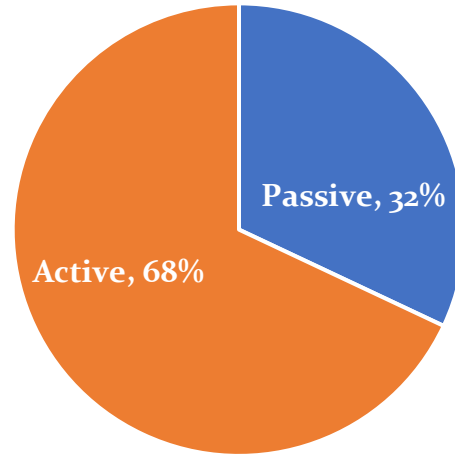
99%

Of Those Classified as Actively Managed Investors We Met with Investors Owning 10.6 million Shares an Average of 2.6x Each



Active Investors	Investor Count	Shares as of 7/2/2018	Value as of 7/2/2018 (\$mm)	Shares as of 7/2/2017	Value as of 7/2/2017 (\$mm)	Activity Count	Equity AUM (\$mm)
Interaction with IR/Management	32	10,578,780	896	15,154,348	849	83	2,250,114.67
No Interaction with IR/Management	227	2,786,981	231	3,363,160	187	-	7,196,503.71

Investor Orientation – Primarily Active

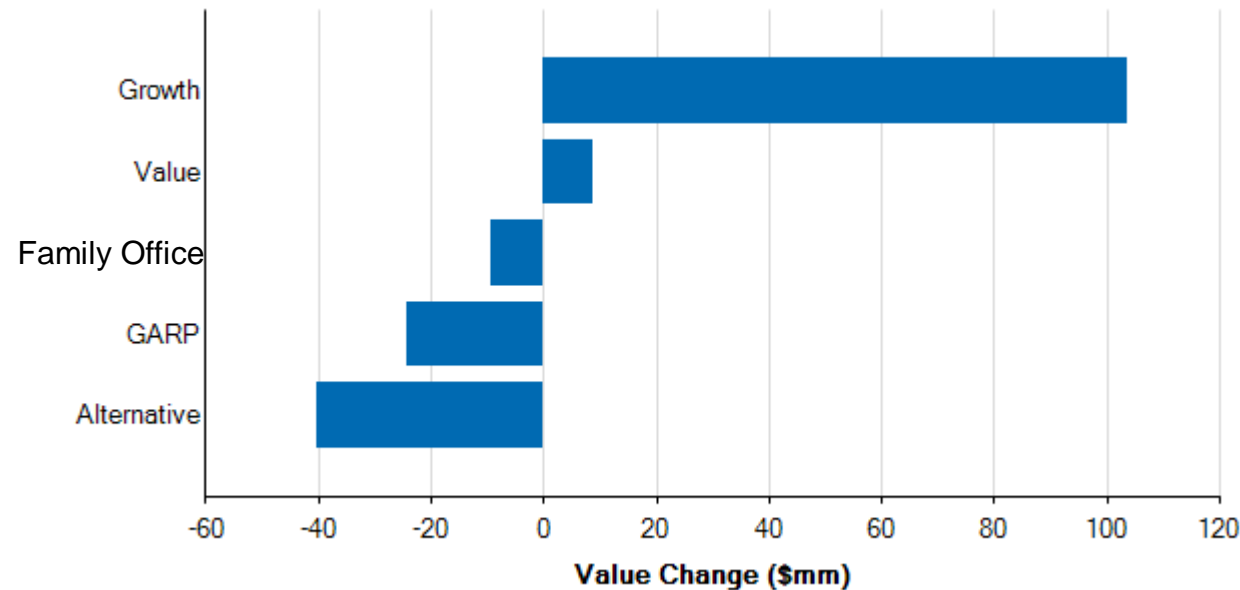


This graph displays the percentage of XYZ Active versus Passive holders as of 7/1/2018

Orientation	Investor Count	Shares as of 7/2/2018	Value as of 7/2/2018 (\$mm)	Shares as of 7/2/2017	Value as of 7/2/2017 (\$mm)	Activity Count	Equity AUM (\$mm)
Active	270	13,365,761	1,127	18,517,508	1,036	83	9,446,618.38
Passive	153	6,331,260	536	8,369,728	469	2	11,816,794.70

Increased Investment by high quality investors with whom we met: Increased Growth + Value holdings partially offset by reduced GARP, Family Office and Alternative holdings

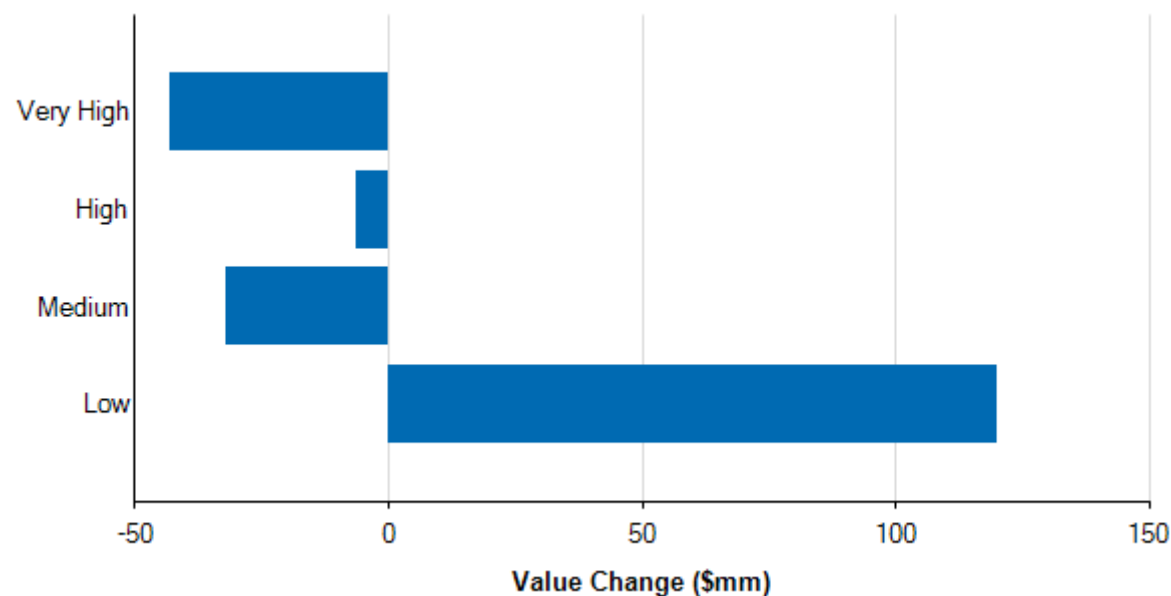
Attendee Ownership - Style



This graph displays the Value Change in XYZ of investors with whom IR/Management has met between 6/30/2017 and 7/1/2018 by Investor Style

Ownership Evolution Clearly Towards Long-Term (Medium and Low Turnover) Investors

Attendee Ownership - Turnover

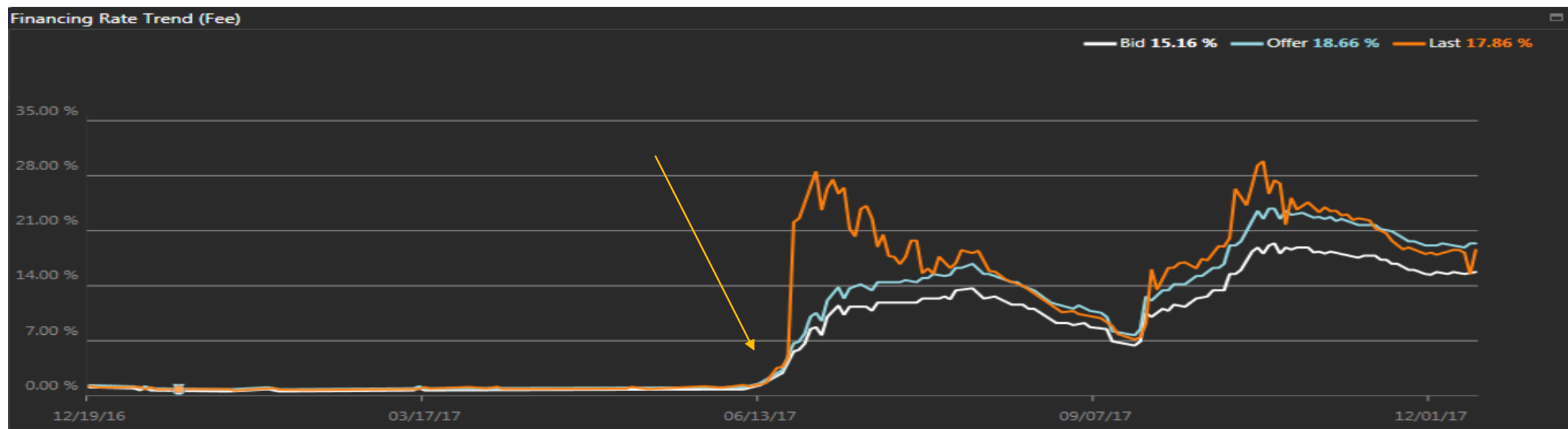


This graph displays position change in XYZ of investors with whom IR/Management has met between 6/30/2017 and 7/1/2018 by Investor Turnover

Short Activism – June 2018

- XYZ Short Lending Rate Trend – What happened in June 2017
- XYZ Trend Charts – Short Interest vs Lending Rate
- XYZ Histogram and Data for Two “Slo-Motion” Short Squeezes
- XYZ Histogram ModernIR Data Analytics
- Short Activist Tactics (not fundamentals based)

XYZ Short Lending Rate Spike & Reaction to Inquiry



- Over the past year and a half, I spoke to a variety of knowledgeable people on this dark art
- Data was downloaded from FINRA on “fails to deliver”. With the data, and information gleaned from these conversations, I put together this comprehensive view on the topic. Note, no one of the sell-side would comment on the squeeze risk citing it as the investors problem, not theirs (to assess risk and live with the consequences)
- In June 2017, the short lending rate spiked above 28% (from 0.5%), and XYZ lost coverage from CSFB, Morgan Stanley and Wells Fargo following the next earnings reporting date in August
- In December 2017, inquiries with NASDAQ on trade execution and uneconomic options trades resulted in the providing of data (this chart and an online system sourced by S3)

Short Interest vs. Lending Rate Trend

Short Interest

5,407,717

Price

\$98.90

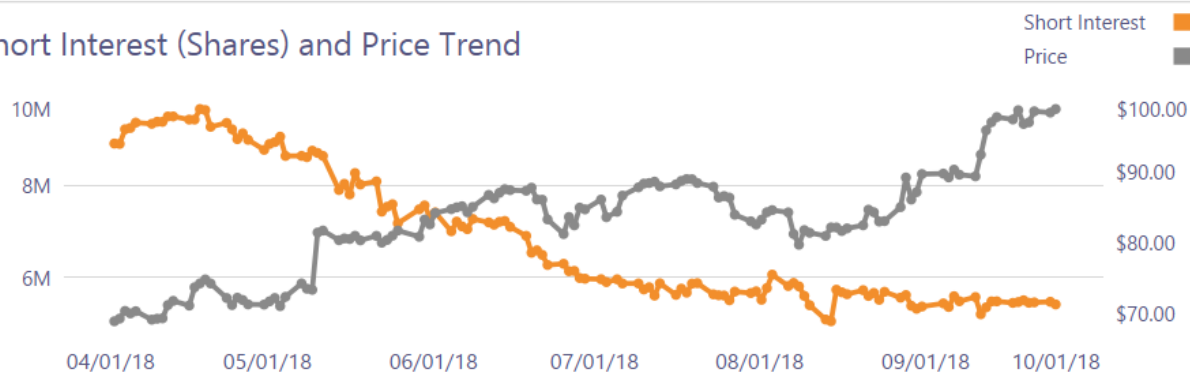
Notional Short Interest

\$534,823,183

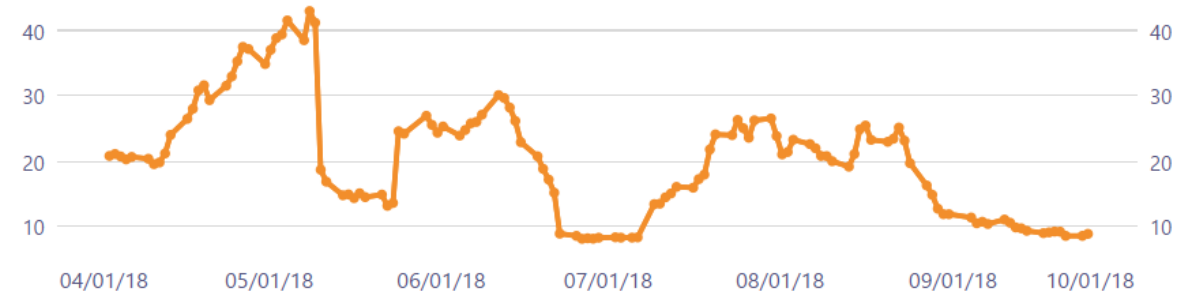
Days to Cover

8.95

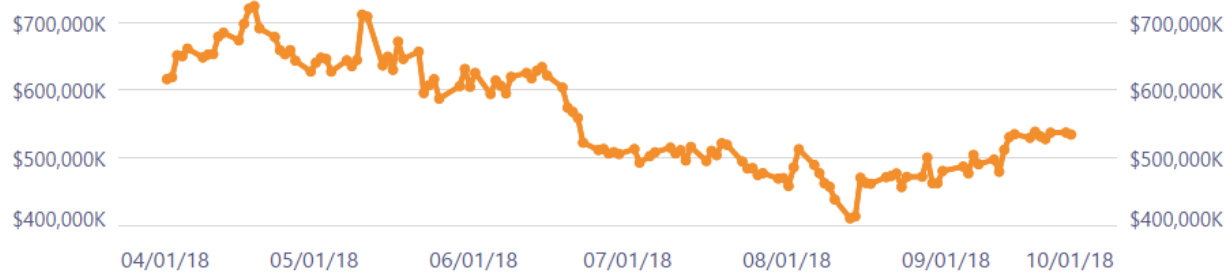
Short Interest (Shares) and Price Trend



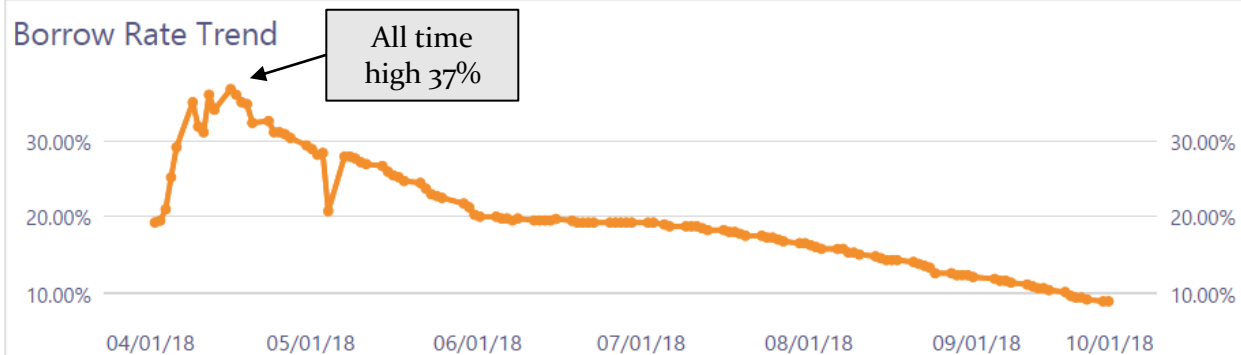
Days to Cover Trend



Notional Short Interest Trend



Borrow Rate Trend



Short Interest vs. Lending Rate Trend, cont.

Short Interest

4,903,784

Price

\$124.53

All time
high \$124.53

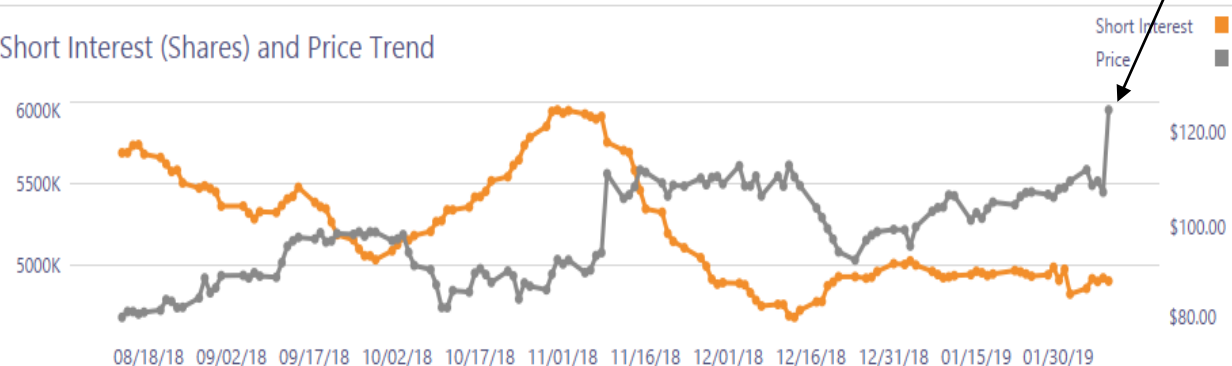
Notional Short Interest

\$610,668,222

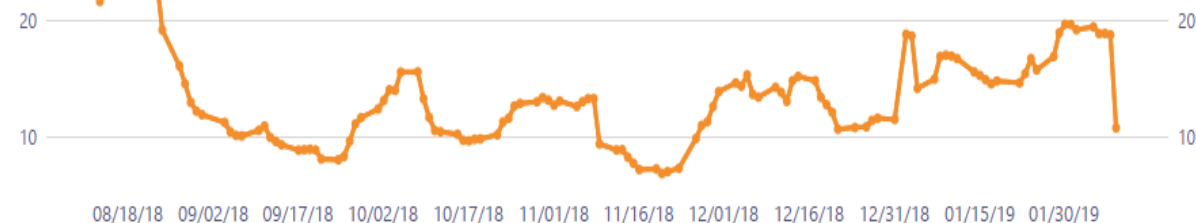
Days to Cover

10.86

Short Interest (Shares) and Price Trend



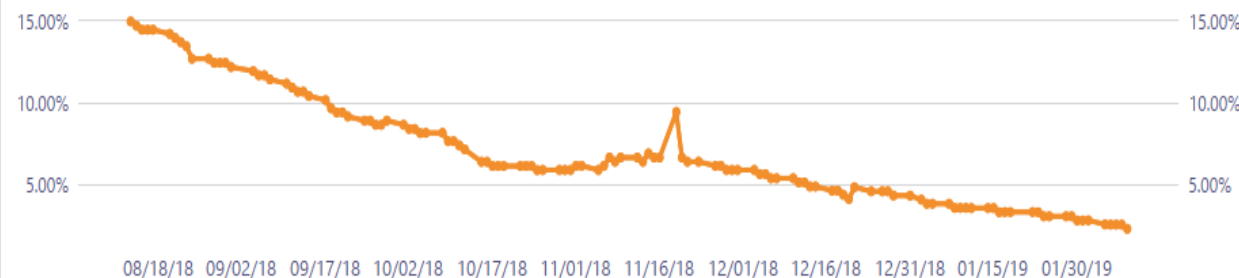
Days to Cover Trend



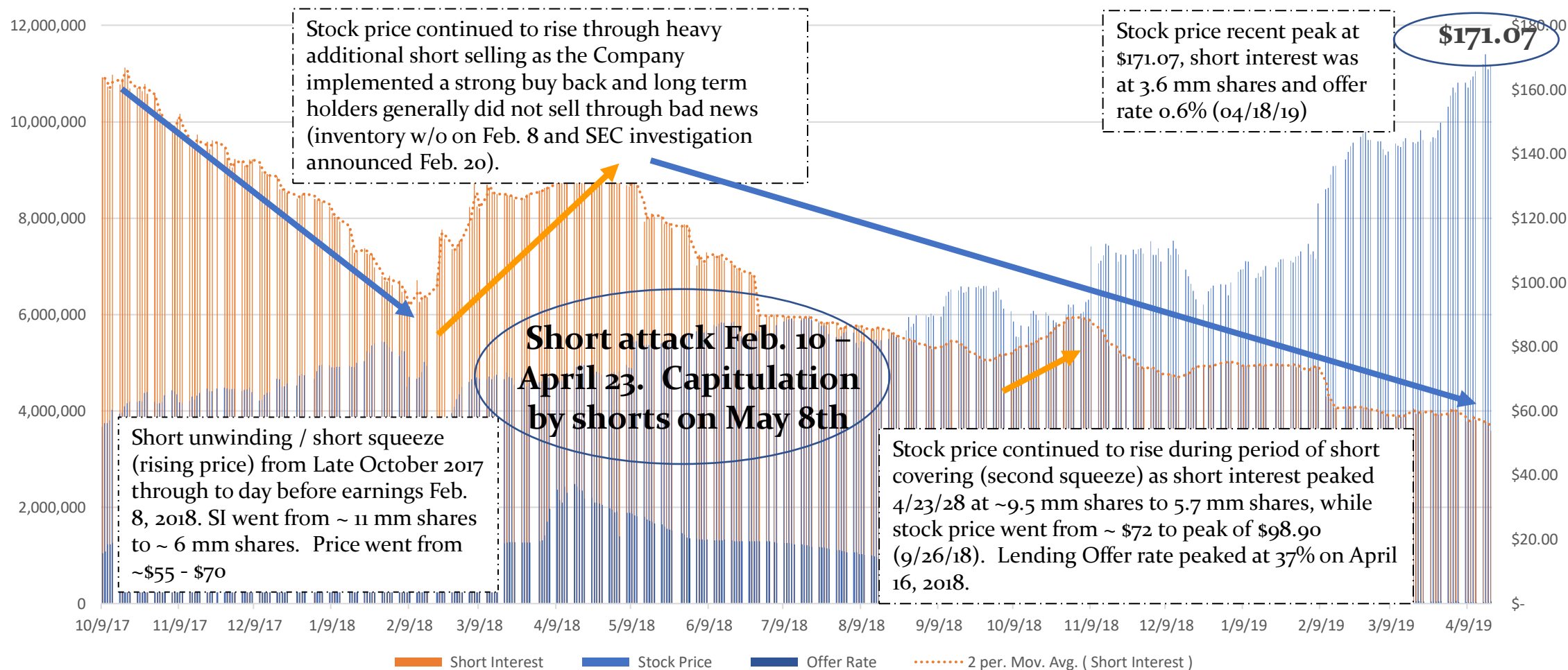
Notional Short Interest Trend



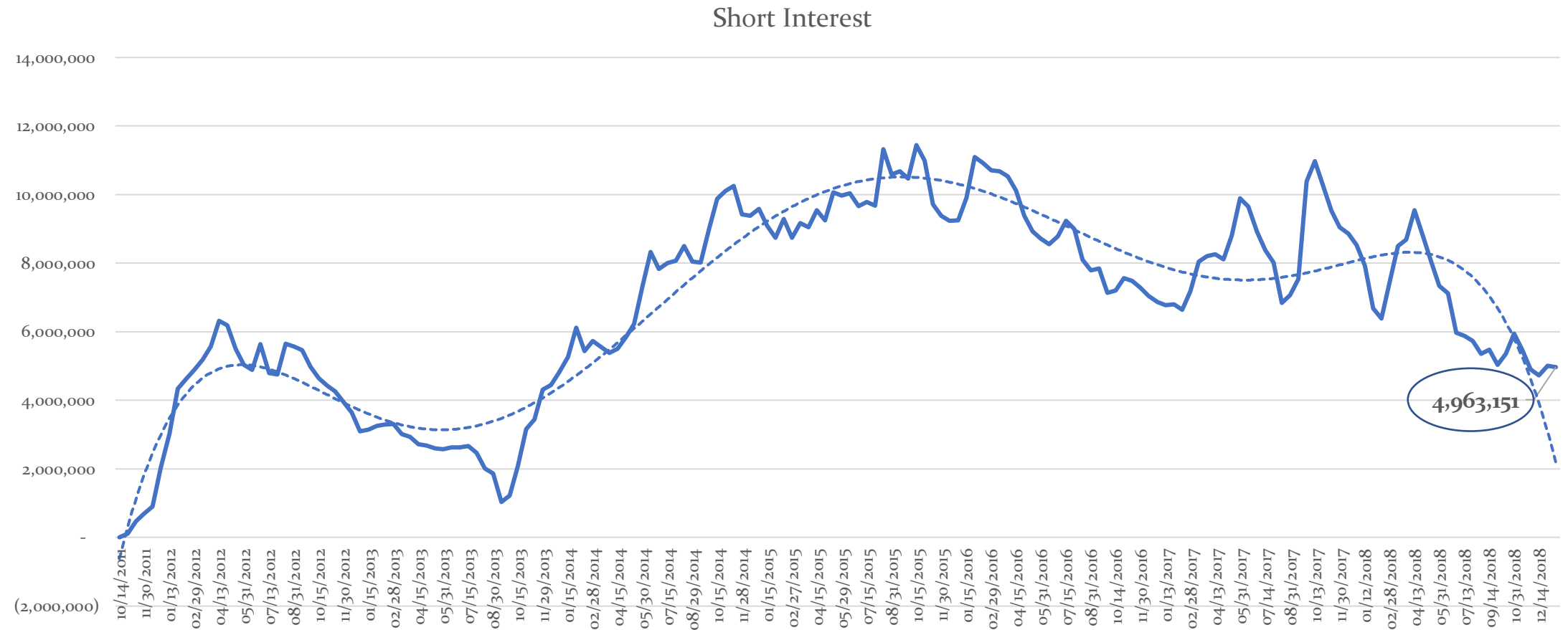
Borrow Rate Trend



1.5 Year Short Interest Trend – 2x “Slo-Motion” Short Squeeze



Short Interest Since IPO at Recent Low



“Mother of All Short Squeezes”



1 July 2018

U.S. IT Hardware and Quantitative Research

Tech's Huge Short Squeeze - What's driven it, and will the pain persist?

A.M. (Toni) Sacconaghi, Jr.
+1-212-407-5843
sacconaghi@bernstein.com

Ann Larson
+1-212-756-4235
ann.larson@bernstein.com

Cherie Tian
+1-212-969-6385
cherie.tian@bernstein.com

Sophia Fan, CFA
+1-212-969-6108
sophia.fan@bernstein.com

Corry Wang
+1-212-756-4113
corry.wang@bernstein.com

Daniel Chen
+1-212-823-3612
daniel.chen@bernstein.com

Tech has been on a roll for the last half decade, having outperformed the market every year since 2013. Not surprisingly over this time, short interest in tech (on a cap weighted basis) declined meaningfully – from 3.2% in early 2014 to 2.0% today. Nonetheless, highly-shorted tech stocks still underperformed lightly-shorted stocks over the last 5 years, meaning that shorting strategies in tech have still generally worked on a relative basis...

...That is, until recently. Since the beginning of May, shorting has been turned on its head. While the entire market experienced a pronounced short squeeze between May 1 and June 21, the magnitude of this squeeze was particularly large for tech – the most shorted tech stocks actually outperformed the market (i.e. went *up!*) by 950 bps, vs. 520 bps for highly-shorted stocks in general.

So what has been driving the short squeeze in tech? Our analyses suggest the cause to be three-fold: (1) The economy has been strong, resulting in strong earnings; a record number of highly-shorted tech stocks beat revenue estimates in Q4 17 and Q1 18, like the rest of tech; (2) The overall market saw a continued, meaningful factor rotation towards growth stocks, which are much more likely to be highly-shorted; and (3) Highly-shorted tech stocks saw a modest amount of short covering – although total tech sector short interest has remained relatively flat to up.

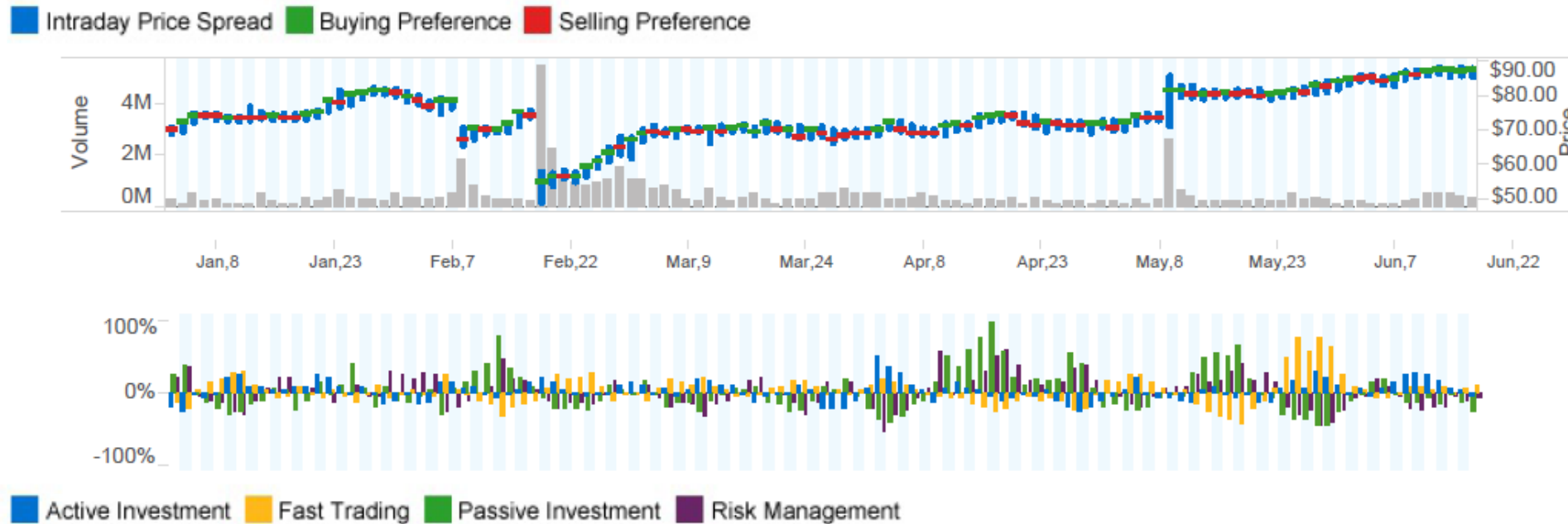
So where to from here? Hard to say, but it is possible that tech shorts could continue to get squeezed until either fundamentals slow (leading to disappointments) and/or the market begins to tilt towards value and away from growth. Notably, last week (June 21 – June 28), the market did see a reversal towards value stocks (the least expensive tech stocks outperformed the most expensive by 230 bps), and the most shorted tech stocks underperformed by 285 bps vs. only 20 bps for the least shorted stocks.

As discussed in our joint note last week, we continue to advocate a modest overweight in tech, with a balanced barbell between expensive/growth and inexpensive/value names, though we are incrementally biased to the value side of the barbell.

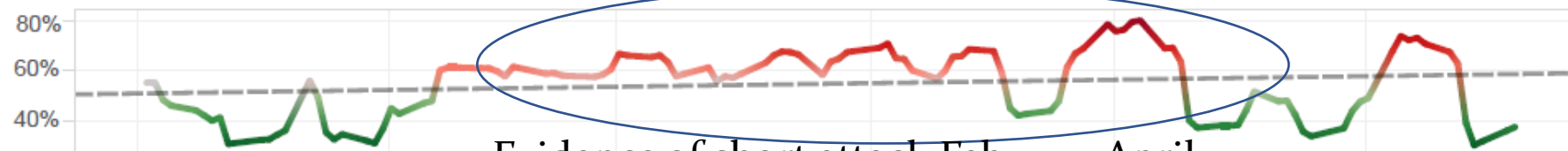
- AB states, “Since the beginning of May, shorting has been turned on its head. While the entire market experienced a pronounced short squeeze between May 1 and June 21, the magnitude of this squeeze was particularly large for tech – the most shorted tech stocks [XYZ] actually outperformed the market (i.e. went up!) by 950 bps, vs. 520 bps for highly shorted stocks in general. So what has been driving the short squeeze in tech? Our analyses suggest the cause to be three-fold: (1) The economy has been strong, resulting in strong earnings; a record number of highly-shorted tech stocks beat revenue estimates in Q4 17 and Q1 18, like the rest of tech; (2) The overall market saw a continued, meaningful factor rotation towards growth stocks, which are much more likely to be highly-shorted; and (3) Highly-shorted tech stocks saw a modest amount of short covering – although total tech sector short interest has remained relatively flat to up.”

Modern IR – Technical Stock Monitoring to Police Banks

MARKET STRUCTURE PROFILE - PRICE/VOLUME & BEHAVIORAL PATTERNS



SHORT VOLUME - % OF DAILY VOLUME



Evidence of short attack Feb. 10 – April 23.
Followed by capitulation by shorts on May 8th

© 2018, High Touch Investor Relations. All Rights Reserved.

Tactics – Years Long Tug-o-war w/Shorts



Tactics of Activist Short Sellers (not fundamentals based)

- Leveraging Journalists – CNBC, Jim Cramer, Herb Greenberg (both have been subpoenaed on this topic)
- Writing their own negative reports (or sponsoring them and “front running”)(e.g. Citron)
- Trading on foreign exchanges to avoid compliance with delivery rules (eg. Quotrix)
- Contact SEC and other regulatory bodies to investigate companies
- Leverage derivative transactions to cover or synthetically short
- Act friendly, pretend to be an investor to gain access to management
- Set “verbal traps” to try to force disclosure of non-public information

IR Goals Should Continue to Drive Value Recognition

- Evolve investment thesis for future growth strategies
- Continue to cultivate long-term/low turnover shareholders that are aligned with management through strategic participation in conferences and non-deal road-shows
- Eliminate imbalances (consider S3, Markit, ShareIntel &/or ModernIR tools)
- Manage sell-side research to achieve accurate and fair reporting
- Consider eliminating quarterly guidance, and other strategies for long-term shareholder fortification
- Consider hosting annual event for top shareholders
- Consider investing in positive media profiling

Contact Us



Laura
Kiernan

High Touch IR
CEO & Founder

1-914-598-7733



hightouchir.com



lkiernan@htir.net



44 S. Broadway
Suite 100
White Plains, NY
10601



THANK YOU



HIGH TOUCH
INVESTOR RELATIONS

1-914-598-7733

www.hightouchir.com