

# Driving 21st Century IR with Market Structure Analytics

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IR in the 21st century must move beyond  
“how do I attract more Active investors?”  
to “how do I lead the board and executive  
team to better understand the trends and  
drivers behind equity value?”

**Relevant. Accurate. Valuable.**

# Did You Know?

The Investor Relations Officer (IRO) is chief intelligence officer of the capital markets for the company. That means your job is much more than telling the story.

**You're responsible for what all of the money is doing** – not just the shrinking part tuning to earnings calls (hundreds of billions every year for more than a decade have shifted from Active stock-picking to Passive asset-allocation by indexes and Exchange-Traded Funds).

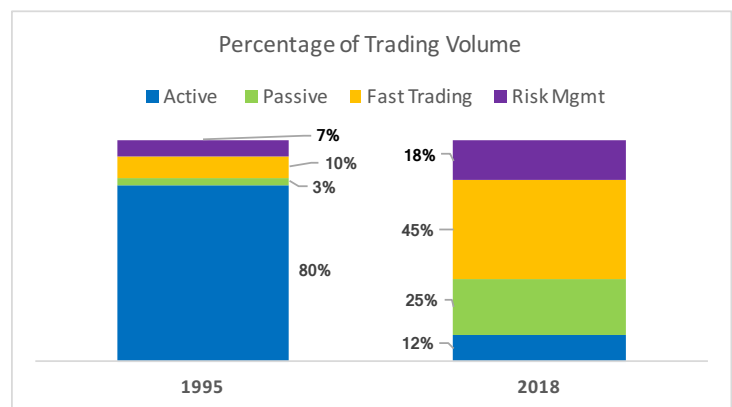
**The good news is the IR job doesn't depend on the presence of stock-pickers. It depends on the presence of money.** There's plenty of it – all of which can be measured, trended, tracked, as feedback on IR strategy, and as metrics for the board and executive team, which have fiduciary responsibility to know what drives equity-value.

**Many still cling to the 20th century idea that “over the long term, fundamentals will drive our stock price.”**

No, what drives stock-price is the money. When 80% of the money focused on fundamentals, the primary purpose of the market was long-term capital-formation.

**Now 88% of volume is short-term trading. The primary purpose of the market is short-term trading.** Long-term corporate objectives are at loggerheads with fleeting arbitrage – all the more reason IR must track it. If nobody is, boards and executives will wrongly suppose the stock is a continuous proxy on strategy. Market Structure (see Figure 1) matters.

**What to do?** Own the data on the money, and use it to expand the strategic role of IR. **Employ data-visualization proactively to continuously inform your leadership – exactly as a chief intelligence officer should.** That's a vital action in markets dominated by Exchange-Traded Funds (ETFs). We'll now show you in practical, real-world fashion how to do it.



**FIGURE 1** - Source: 1995 data estimated on firms making markets then, data from ICI.org; 2018 data from proprietary ModernIR models. “Market Structure” is the behavior of money behind price and volume. Active is stock-pickers. Passive is indexes, ETFs, quants. Fast Trading is speculators. Risk Mgmt is leverage.

# Track Behaviors Around Earnings, News, Events

The most important activity for most companies each quarter is reporting financial results to Wall Street.

Every IRO should measure what all the money is doing – Active, Passive and other behaviors – before results, and then how it changes afterward. In the example here (Figure 2), ModernIR Market Structure Analytics were used to create a view of how money behaved on both sides of results.

From Apr 12-18 there were five straight days of net buying (price/volume chart shows all horizontal green bars meaning price closed above intraday midpoint, indication that buying trumped selling), and on Apr 17, see the big blue bar? That's Active VALUE investment expecting price to rise following results.

Results hit the tape Apr 23, producing big volume and price volatility – but no blue bar. Instead a purple bar led, and selling trumped buying. That's derivatives bets.

Goldman Sachs's derivatives desk released a report in Feb 2019 saying the top fourth-quarter-earnings trade was buying five-day out of the money calls. It produced an average 88% return! Not on the stock but on the rising value of calls.

**Derivatives bets cause big volumes because there are three parties to each trade, in effect:** The buyer of volatility, the seller of volatility, and the counterparty protecting the seller. Volume becomes a calculus equation rather than simple addition and subtraction. But it's not a big holder buying or selling.

The day after results (Figure 2 again), back came Active buyers, the size of the bar this time signaling Growth-at-a-Reasonable-Price (GARP) money, and the stock posted five more days of net buying. Most importantly, this Active buying produced a new "Rational Price" on Apr 24, our measure separating buying by Active Investment from other behaviors.

FIGURE 2



## Track Behaviors Around Earnings, News, Events *CONTINUED*

**That's resounding success delivering a message – and it happened AFTER results, not with them.** It's the IRO's most important metric. Many new Rational Prices means your fundamentals, reflected in the actions of core Active holders, are a key input for how the market prices your stock. Without Rational Prices, factors besides fundamentals will assume price-setting.

Note too in **Figure 2** that short volume, the gray bar chart at bottom reflecting the daily percentage of trading volume comprised of borrowed shares, declined (but it's still averaging 56% of daily trading volume, a challenge to further gains), another victory for the IR team.

### Let's look at one more example with earnings.

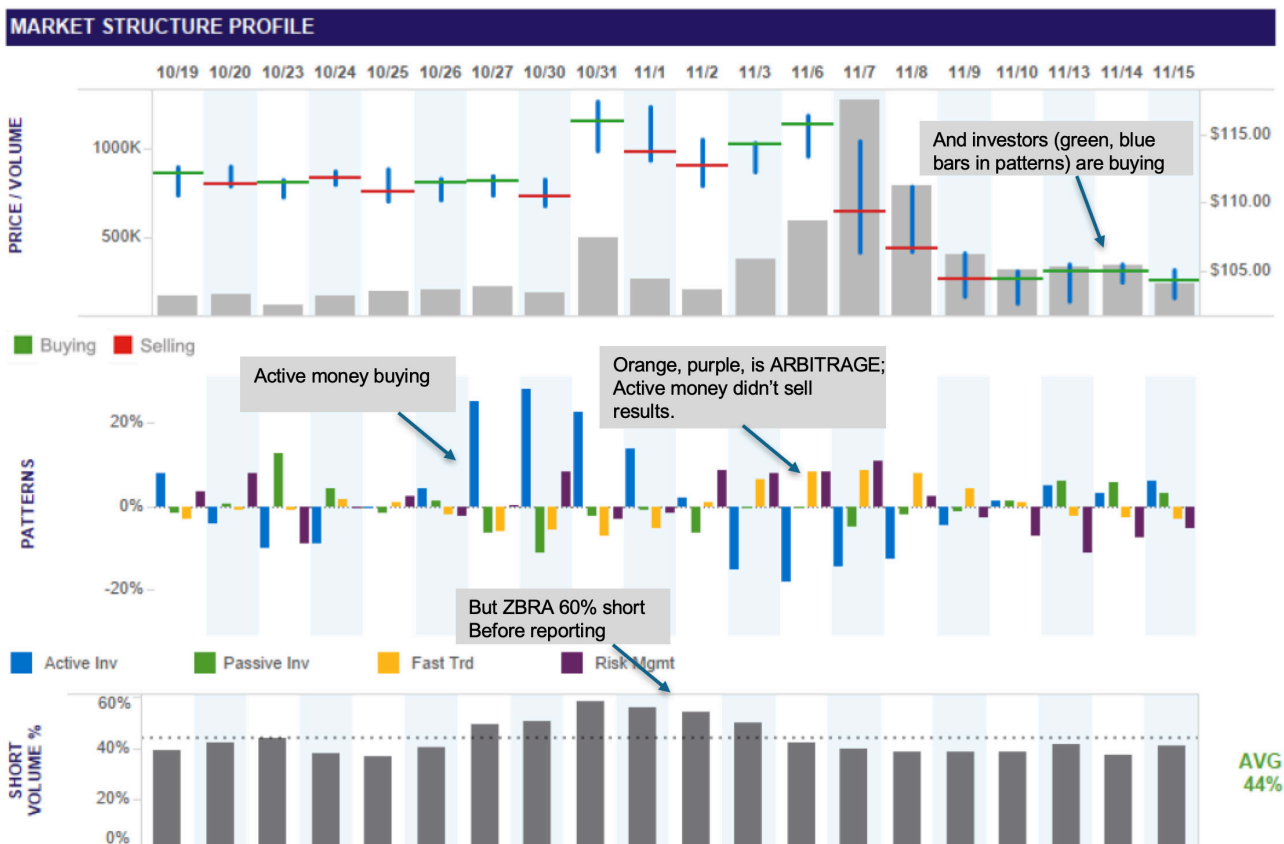
Have you reported strong results and lifted guidance, only to see shares fall? The executive team may say, "IR people, how could you blow the message after all our hard work executing on the business plan?"

There are data for that! Figure 3 is a real example. A technology company (ZBRA) beat and raised (exceeded expectations and then increased them again) and the stock dropped 8%. **The data show that Active money bought before results, clearly expecting a good quarter.**

But then they stopped. Short volume was over 60% of ZBRA's trading volume. The dominating behaviors were Fast Trading and Risk Mgmt, a combination pointing to short-term speculation on the spreads between index and stock options and ZBRA. **Active money sat out because it was happy. Left to speculators, price dropped sharply.**

**It had nothing to do with results.** The trade was speculative. *Understand that contrary to a widely held but erroneous idea that speculators can only follow investors, machines are fully capable of executing automated trading tactics from beginning to end.* They set prices for no other reason than the model says to "trade this way."

FIGURE 3



Back to **Figure 3**, when that pattern finished, and shorts had covered (shorting dropped from 60% to 40% -- and for reference, on any given day 45% of all volume is short, borrowed), and the stock leveled off, look what pattern returned? Both Active and Passive investors. Two months later, the stock was 10% over the pre-earnings level.

It's unfortunate that market rules favor short-term trading. Holders were deprived of returns they can't fully recoup. But seeing the data – data-visualization – changed every-

thing. **The CFO loved it and circulated it to the board.**

**Who earned the kudos? The IR team.** Confusion turned to comprehension – even if no one liked the fact that speculators can loot long-term holders. **The key action was providing information.**

And ZBRA had a new Rational Price within a week of results – more proof, if any more were needed – that the message was not the issue. It was market structure.

## Track Event-Driven Behavior

No matter how certain one is that “Activists will never be interested in us,” any company can be a target. When you've got one, the consultants set upon you in a swarm with crisis communications, surveillance, proxy, legal, banking services (and huge invoices).

Where were they beforehand? **Stock surveillance is notorious for missing Activists.** The problem is with settlement data. The market works nothing like it did when surveillance was created 35 years ago. It's our experience that less than 10% of trading volume manifests in settlement now, and often much less than that.

**Market Structure Analytics are built on contemporary trade-execution data and current rules governing how money moves into and out of the market.** Activist intentions manifesting through brokers – even if an Activist uses derivatives – change behaviors. We use algorithms to search for it, and we've never missed one in 14 years. You can't hide value at risk. But you can hide from settlement.

**Figure 4** is a classic example of the patterns our machines see. Months before Elliott revealed a tiny foothold in Convergys, leading to a sale of the company over a year later, we alerted the team to event-driven behavior.

FIGURE 4

### Activism Science: Vital Defense (Elliott, CVG Aug 2017)

1. Purple bars imply a large FORWARD contract, limited stock-buying.
2. Pattern occurs at August option expirations when derivative instruments price, abruptly stopped, signaling a foothold but nothing more.

**KEY TAKEAWAY:** We warned in Aug 2017 about a position that manifested in Mar 2018 (tiny footprints in Nov 2017 13Fs) and led to a deal that closed Oct 4, 2018, over a year later.



The data even told us that it was comprised primarily of a forward – a right but not an obligation to buy shares. We knew in August. In November when 13Fs posted, Elliott had a toehold only.

**Early warning is crucial, so one can prepare.** This applies to all forms of event-driven behavior, from short attacks to M&A. Our analytics support many of the highest-profile deals involving public companies, because we can see how

deal-arbitragers bet. We sometimes know a company is a target before the company itself, because deal arbs tell us. We can measure if there is short-attack risk. When a short thesis is published, we can meter whether it's gaining purchase with investors or destined to fail.

These essential behavioral perspectives elevate IR, making you strategic, valuable, relevant – and accurate.

## Know When it's About You and When it's Not

**Your listing exchange may have no idea what's setting your price (no offense to them) but that doesn't mean you should have no idea.**

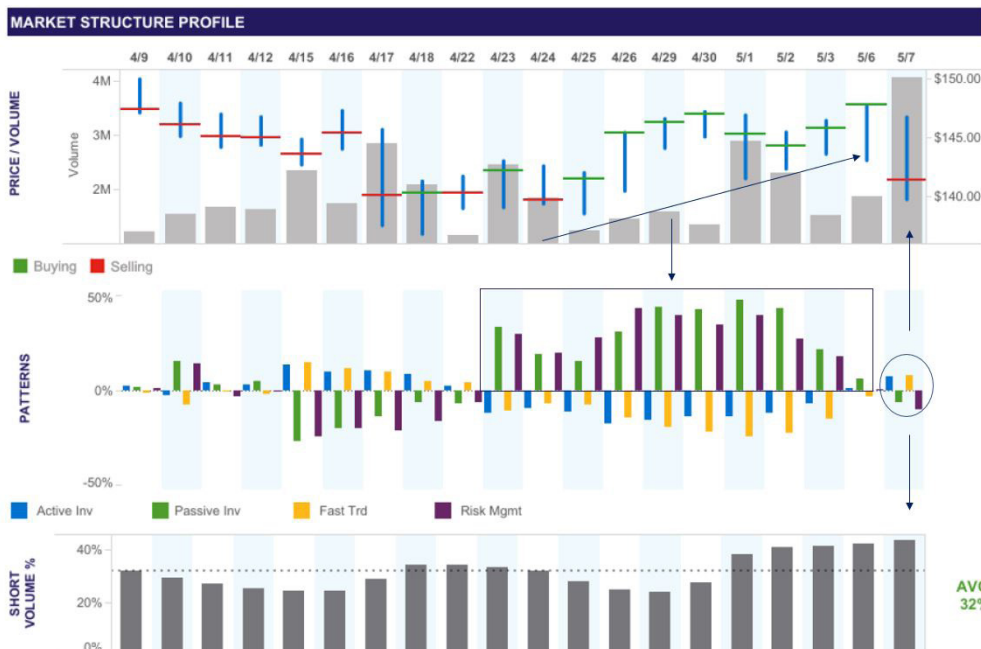
Price-setting is a mathematical fact under market rules requiring trades to meet between the best bid and offer.

The point is, we can measure what kind of money – not what party but what behavior – sets price. Think about the tremendous value to you and your executive team. If you go on the road, and Active money responds, it's measurable in both price-setting and market-share of volume.

And conversely, if your stock is soaring and ETFs are driving it, it'll be important to know when the patterns change – because it's likely to be a buying opportunity for value money when ETFs rotate out.

It's all measurable, as **Figure 5** shows. ETFs – those green and purple bars (bars that are higher reflect increasing behaviors to compare then to buying or selling) – drove this company's price way up ahead of results. But it wasn't rational. With results, Active money was a minor seller, and shorting hit a 20-day high, and ETFs, which had driven gains for two weeks, were suddenly out. Price dropped 7%.

FIGURE 5



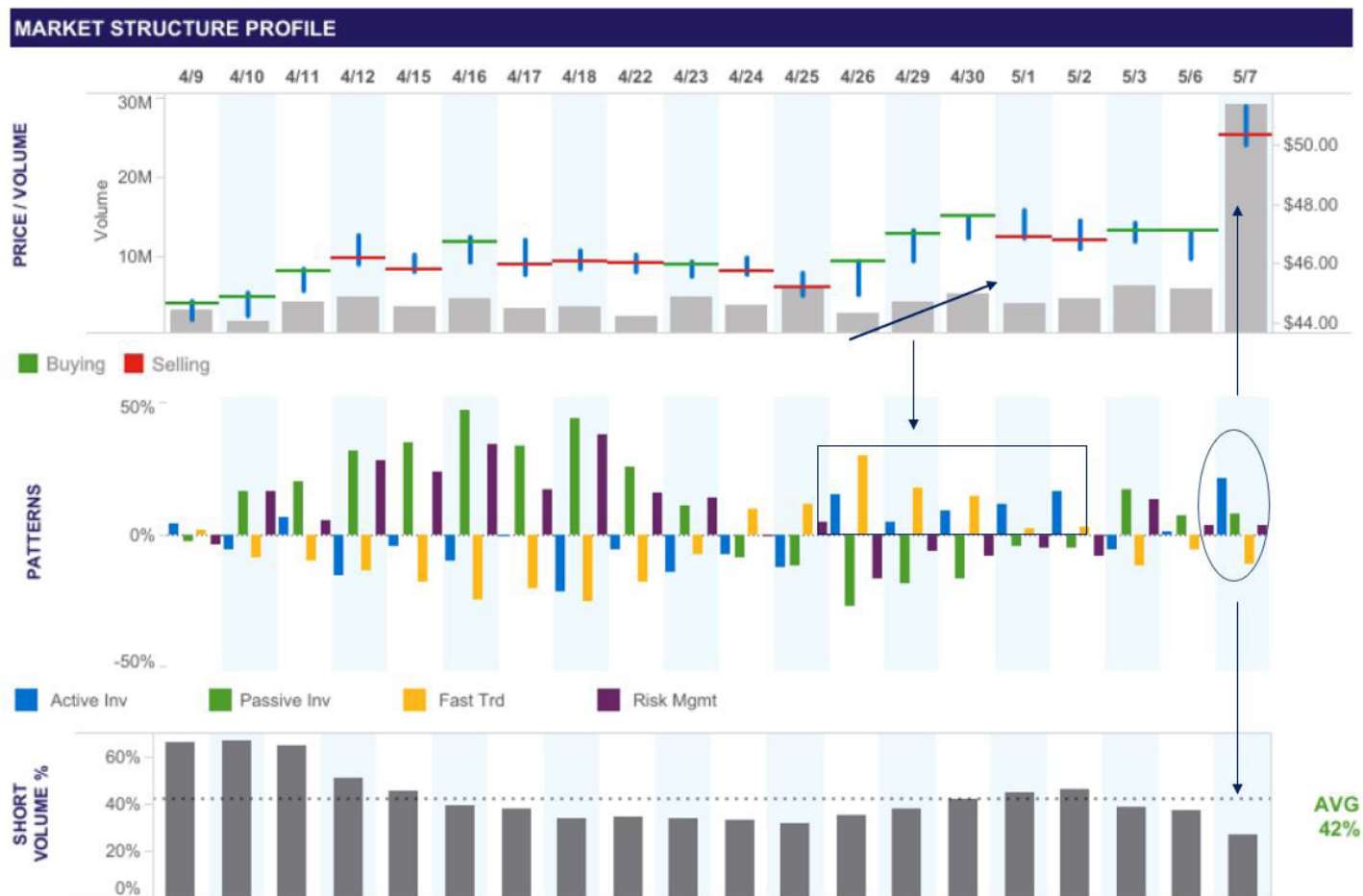


## Know When it's About You and When it's Not CONTINUED

**Figure 6** shows the perfect reverse view: Active money bought ahead of results, instead of Passive money. Active money was correct. The stock exploded up with results, which produced short-covering – but also arguably profit-taking by Active money quick to lock gains from its correct assumptions.

Suppose you're the IRO providing these simple, one-page visualizations to your executives and directors, *showing clearly when it's about you and when it's not*. Your IR stock will rise. So to speak.

FIGURE 6





# Proactively Inform Board, Directors, with Data Visualization

**We've long prided ourselves in the IR profession with how "my executives never ask me about the stock," and "what the stock is doing has got nothing to do with IR."**

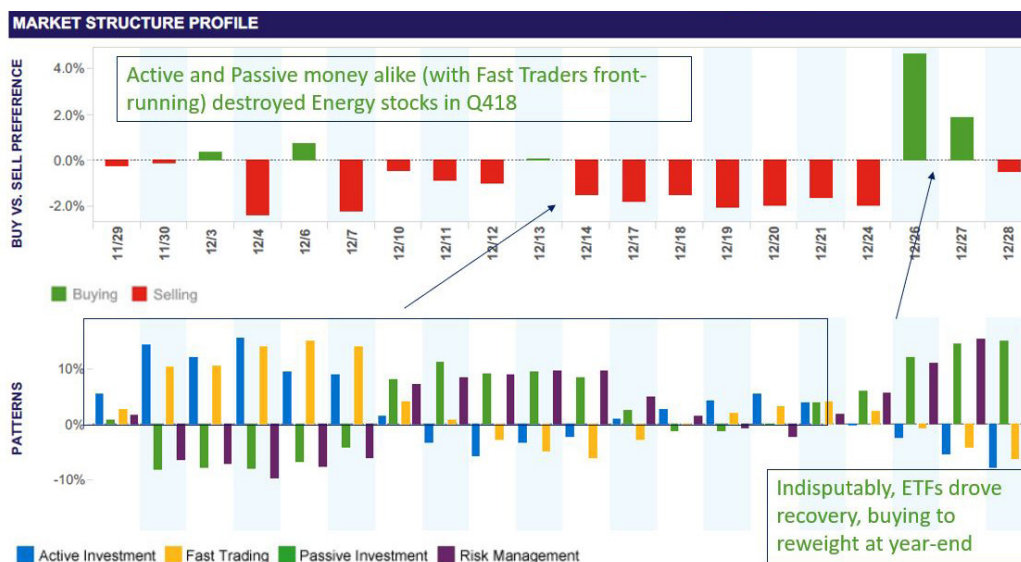
Well, why are we public companies, then, if not so there's publicly priced equity – that ostensibly somebody should be measuring? **The idea that we'd ignore the stock is silly.** Nobody – no one – ignores value. Not even private companies. The stock is often the bulk of executives' net worth. Do you think they care? To say we don't care about the stock is akin to a business manager saying, "I never give the management team an update on how the business is doing." How long would that person last in the job?

**Do the opposite! Update executives and the board on what's driving the stock without waiting to be asked.**

Provide regular views on trends, changes in behavior, how Active or Passive money is increasing or decreasing, and more. You can never do too much to demonstrate your value.

Market Structure Analytics make that process easy with a relentless supply of reliable, mathematically derived views (that our team produces, reducing work for you). For instance, take **Figure 7**, which highlights ModernIR's Sector Insights for Energy stocks at year-end 2018. Sector Insights compiles data for all the stocks comprising each of eleven major sectors (and compares them to performance of sector ETFs, and your stock).

FIGURE 7



The IRO can visually illustrate what caused the sector to rise or fall. The view for Dec 2018 is startling, showing relentless selling by, first Active Investment (blue bars, with Fast Traders front-running) in early December, followed by a crushing Passive blow (principally ETFs, apparent in green/purple combo), as all the Passive money stampeded to the exits (a harbinger for the next bear market).

It's also starkly apparent that Passive money touched off the fuse of the rocket Q1 2019 rally, buying at

year-end because it must by rule true up tracking periodically, and ETFs were likely underweight collateral, indexes underweight equities. Off the market went (for no rational reason) on one of the great rallies of all time.

You can show your board and executive team. And you'll win accolades for bringing outstanding data to the people who care the most – whether they say so or not.

# Benchmark IR

**Whoa. Shudders and goose bumps. Do I really want to benchmark...my job?**

Relax! You have two victories via data here. First, YOU get to define the success measures. We provide them, yes, but you're the locus, the keeper of the data vault. Second, you can use these measures to aid your efforts. We'll explain in a moment.

What's more, how many actions in IR stem from tradition rather than data? We do things because it's what we've always done. Are they working? Do they matter? Shouldn't we be measuring it?

Everyone in strategic roles, including the IRO, should be **controlling the controllables**. For the IRO, that means are my investors engaged? Have I cultivated a diverse palette of institutional relationships so somebody is routinely setting price, competing with Fast Traders and Passive Investment? What part of my volume is being driven by Active Investment?

We track those items. **Engagement is a correlation score** between **Rational Price**, prices set solely by Active Investment, and the midpoint of prices (because more than 80% of trades now occur at derivations of midpoint, from VWAP to TWAP to pegged and floating) set by everything else.

FIGURE 8

## Board Slide: Controlling the Controllables

**Engagement** reflects the degree to which Active Investors, core holders, are competing to buy shares.

**At Aug 16, 2018**, 99%, in the top 1% of all public companies, and 13% better than the broad market. MSI investors are well-informed, the stock fairly valued.

**Engagement has improved steadily** over the past year, consistently beating market levels and rising from 90% a year ago in August to 99% now.

**RISK: There's no more room for improvement!** MSI has managed expertly but now expectations are very high.



**High correlation says fundamentals are a key factor in stock-valuation**, and, by extension, that you've got a diverse palette of core Actives who are regularly setting prices (contrary to IR orthodoxy that we focus only on long-term buy-and-hold money. If we do that today, shares may act like a closed-end fund – likely to diverge sharply from NAV).

Rational Price is calculated by algorithm when a) Active money has the greatest day-over-day increase among behaviors, b) is buying (price closes over midpoint), and c) is present at a statistically meaningful level (above norms).

**Figure 8** is an actual board slide from a client (MSI). It says the IR team has pushed Engagement into the highest percentile – great work! – but cautions that the bar has been raised as high as it goes, suggesting risk is rising (and note, this is from Aug 2018 – right before the market tipped over. Money was overconfident in everything then).

**When Engagement is falling, you've got ammunition for resources** – targeting, maybe support from an IR firm, more executive time, more proactive outreach. Data drives management – and credibility. Use it. We've got it. We're here to help.

## Summary: The Future of IR

We can't do IR like it's the 1980s. That's doing IR like a caveman. The future, the 21st century, belongs to IROs who use data to drive measurement, management, internal communication and benchmarking. Not data only for targeting more investors, but data for measuring all of the money, all of the time.

Let's collectively reposition the IR role beyond "how do I attract more Active investors?" to "how do I lead the board and executive team to better understand the trends and drivers behind equity value?"

**We're here to help you rock the IR chair!**

**For a free Market Structure Report and demo on how to read our analytics, send a note to [info@modernir.com](mailto:info@modernir.com)** with subject-line "Free Market Structure Report." We'll show you how data can revolutionize your value in the Investor Relations role today.