



New Constructs®

Diligence | Independence | Performance

Artificial Intelligence for Smarter Investing

Grow & Sustain Wealth. Achieve more.

Important Disclosure Information is contained on the last page of this report. The recipient of this report is directed to read these disclosures.

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New Constructs, LLC

- Founded in July 2002; became a hedge fund from 2007-2015; re-launched research business in 2014
- Track record: model portfolios and research featured by [Barron's](#) and [CNBC](#)
- Expertise and experience: accounting, finance & technology

David Trainer (CEO):

Former auditor and executive compensation consultant with Arthur Andersen, equity analyst at Credit-Suisse and hedge fund manager.

Lee Moneta-Koehler (COO):

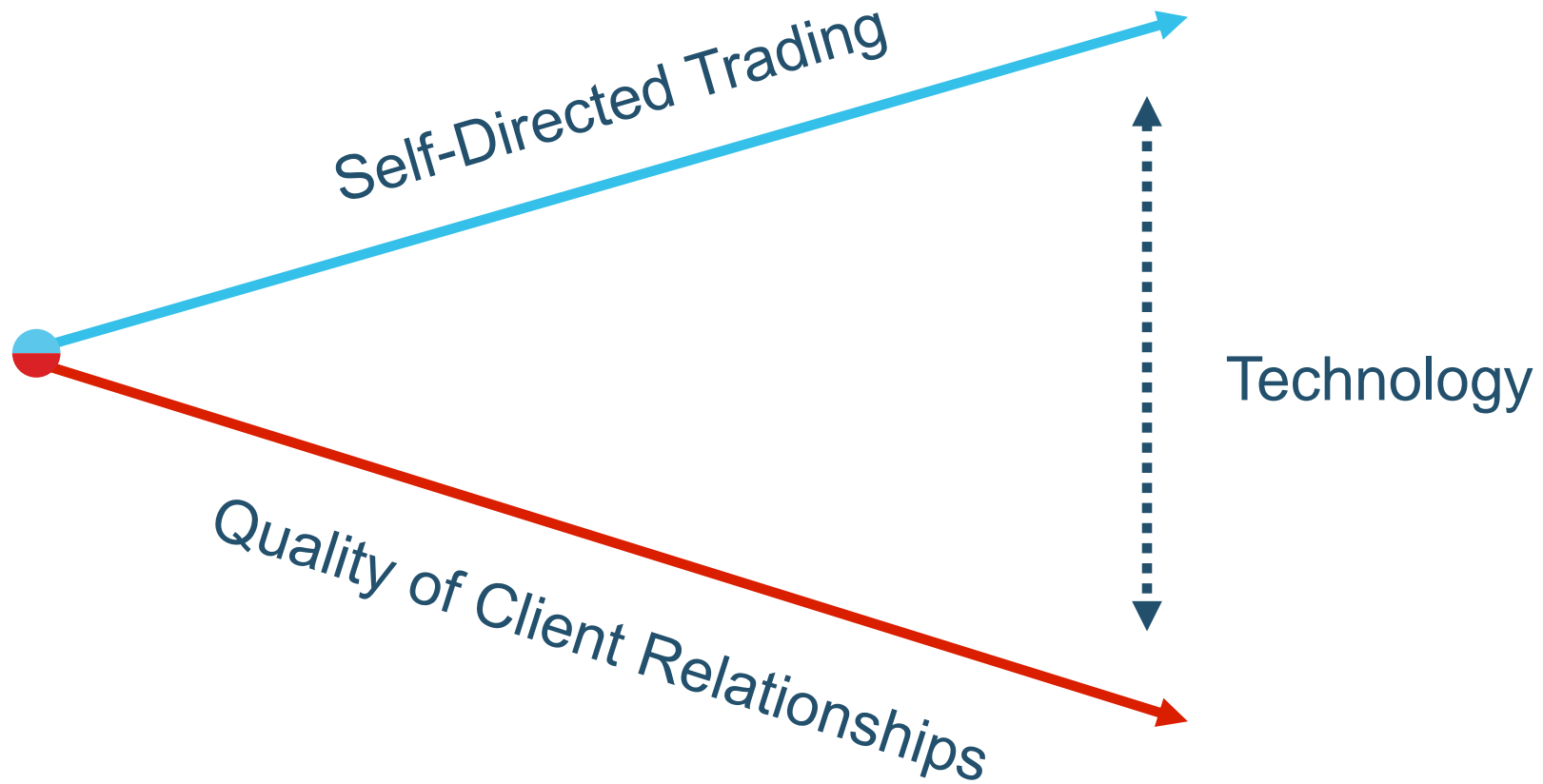
Former Director of Research and equity analyst at New Constructs. 10+ years of experience developing financial technology.

Top Minds in Machine Learning Around the World (CTO):

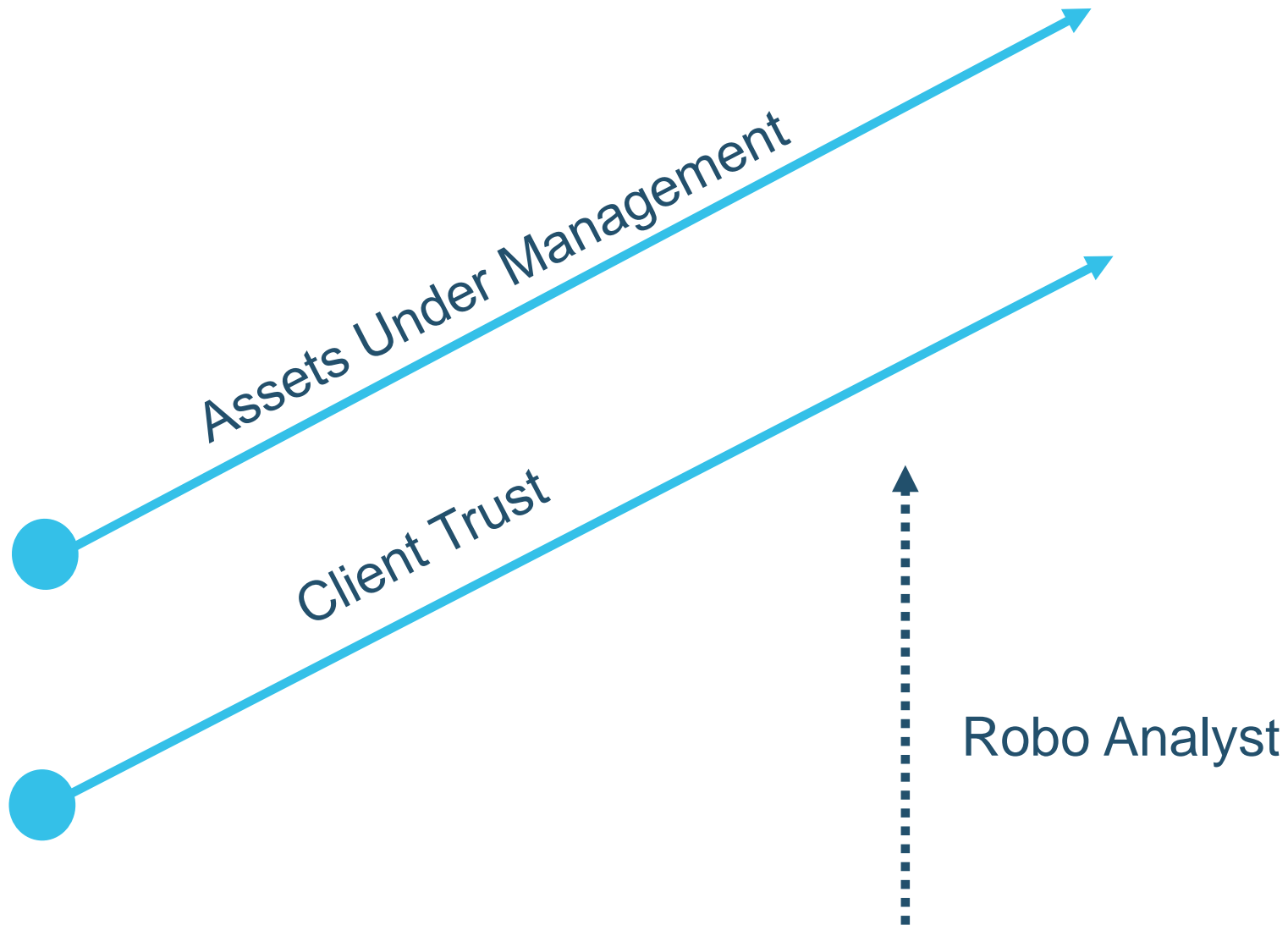
We attract top talent to fill dynamic needs for furthering our cutting-edge technology. Our existing technology offers unparalleled application of machine learning and natural language processing theories and techniques. “New Constructs has the answer key”.

TECHNOLOGY & REGULATION ARE CHANGING INVESTING

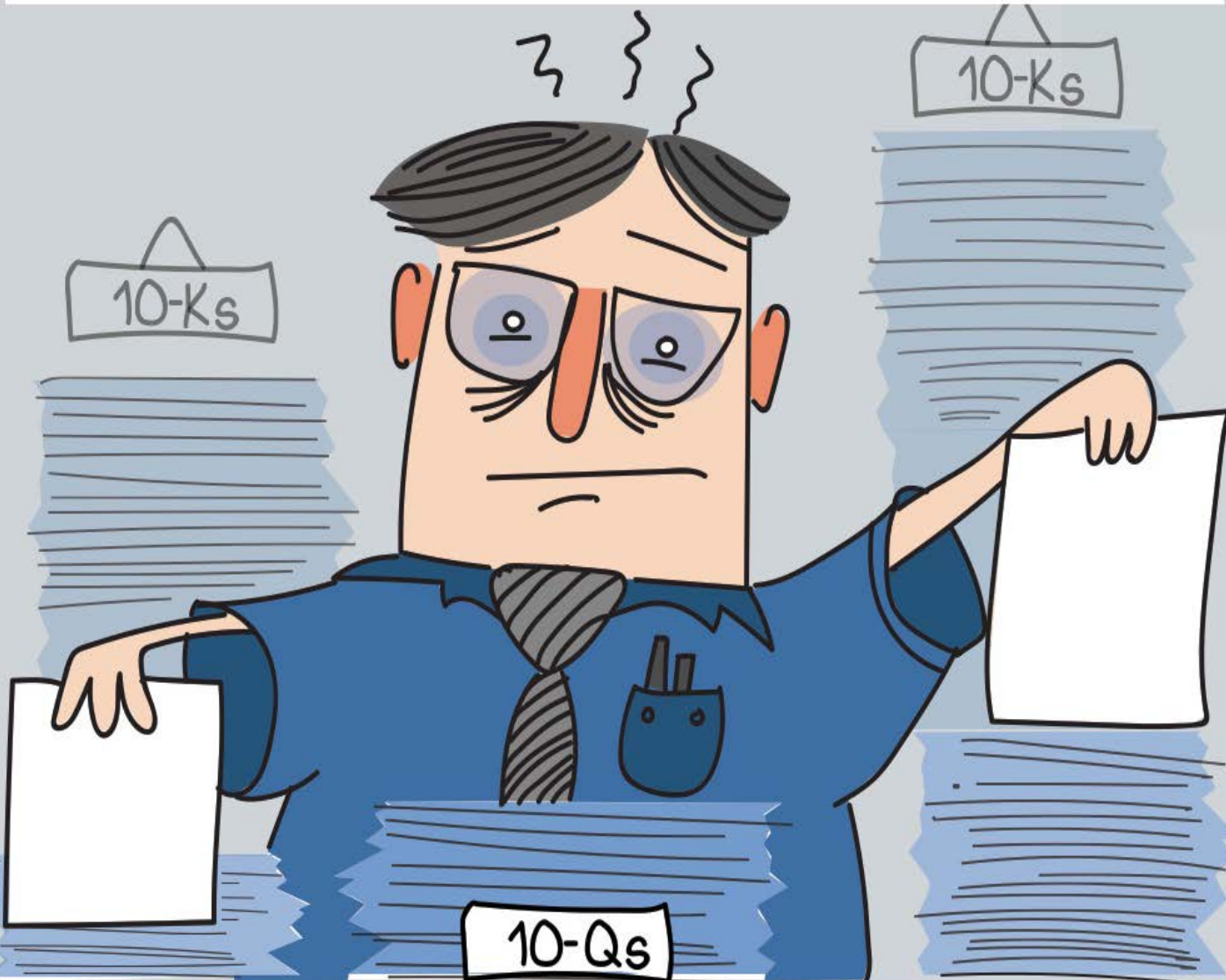
More Competition: Robo Advisors & Index Funds; DOL



TECHNOLOGY WILL EVENTUALLY WORK FOR YOU



WHO HAS TIME TO READ 200+ PAGE FILINGS?



MACHINE LEARNING FROM EXPERTS

Human-Validated Parsing Instructions from 120,000+ Filings

OUR FORENSIC EXPERTS USE CUTTING-EDGE TECH TO SHINE A LIGHT IN THE DARK CORNERS OF FINANCIAL FOOTNOTES.

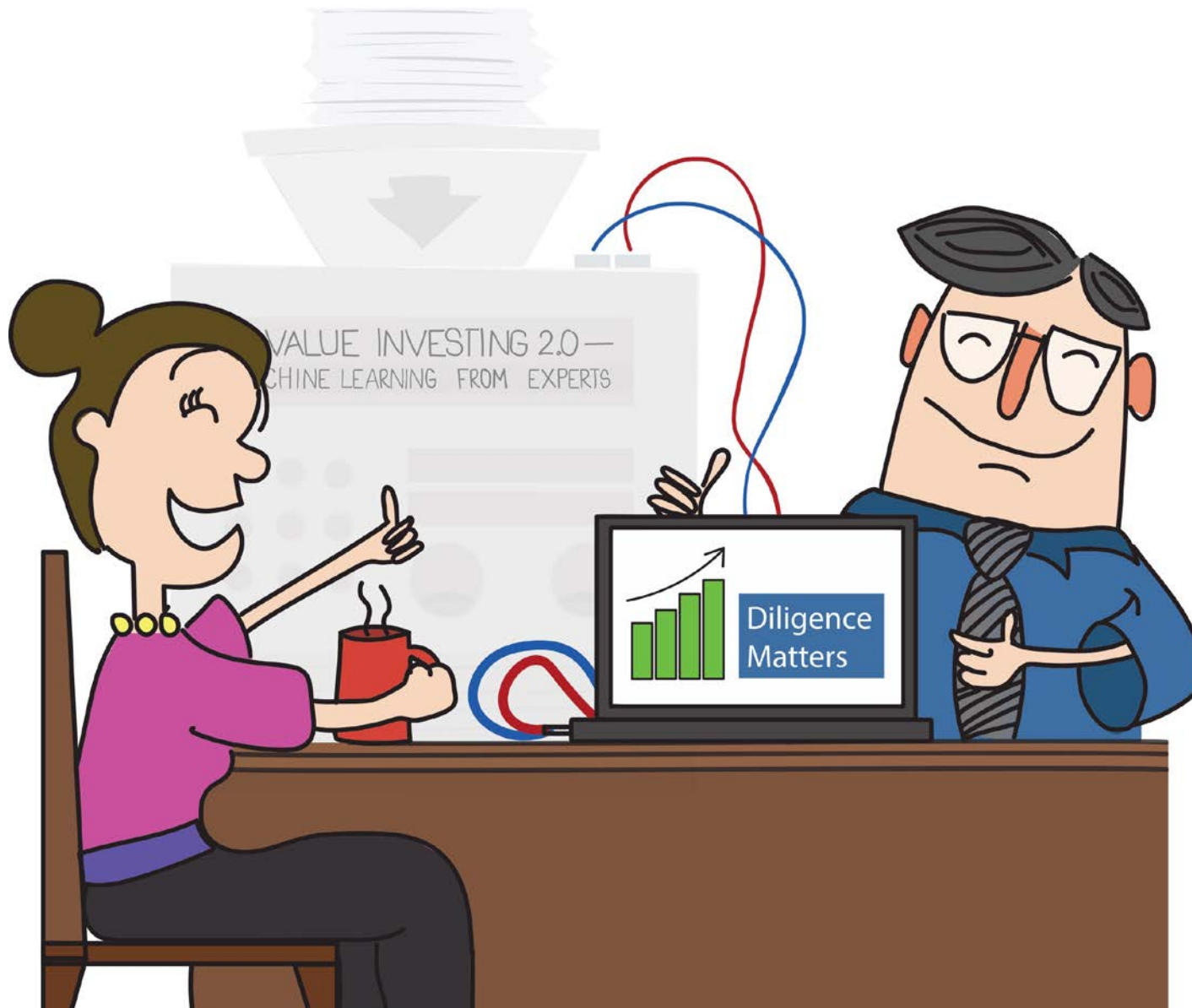
FINANCIAL FOOTNOTES
→ MATTER ←
DILIGENCE MATTERS

DATA
QUALITY

—VALUE INVESTING 2.0—
MACHINE LEARNING FROM EXPERTS

GIVE CLIENTS THE (FIDUCIARY) SERVICE THEY EXPECT

LEVERAGE THE LATEST TECHNOLOGY AND GET AN EDGE
WITH OUR RESEARCH ON STOCKS, ETFS AND MUTUAL FUNDS



Key Benefits

1. More trust from clients
2. Cost effective fulfillment of fiduciary duties
 - a. Comprehensive
 - b. Objective
 - c. Transparent
 - d. Relevant

DISCLOSURE TRENDS ARE NOT YOUR FRIEND

More Data, More Noise, More Complexity

- Filings have grown to **200+ pages**
(That's longer than the average novel.)
- Increasingly complex and time-consuming work
- Accounting rules are constantly changing

Regulators & Media Are Not Always Assets

- SEC, FINRA, FASB
- CNBC, Frank Quattrone

FOOTNOTES MAKE A DIFFERENCE

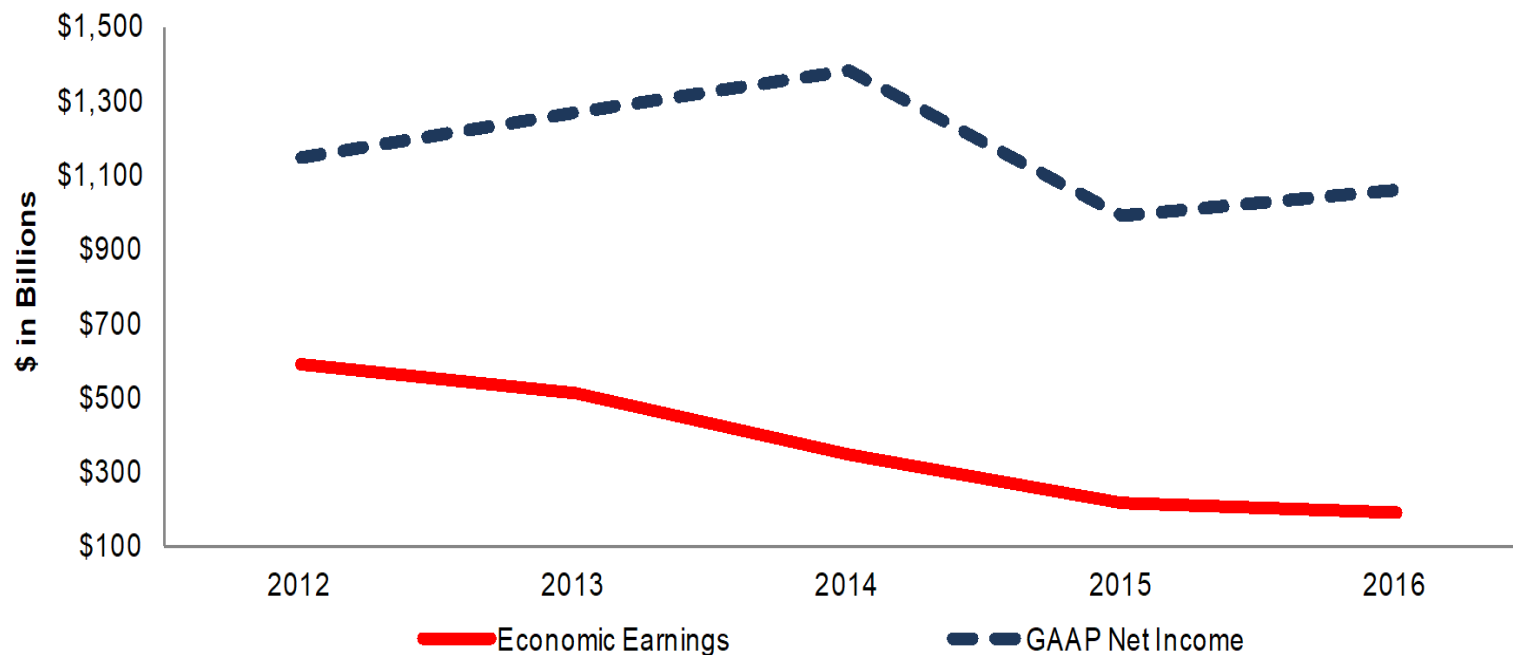
(Unscrubbed) Earnings Trends Are Misleading

“Look at the financial footnotes in 10-K filings and the gains then disappear”

“Only 1 sector has experienced real earnings gains in the past 12 months”

– MarketWatch.com [5/4/17](#) & [2/28/18](#)

GAAP Earnings Up, Economic Earnings Drop



2010 10-K Revealed Abnormal Pension Assumptions

- 2.2% of revs from pension, abnormally high return on plan asset assumption 8.7%
- Underfunded by \$2.6B or 3x the market cap at the time
- Valuation implied 10% CAGR in NOPAT for 11 years
- Down 90% while S&P 500 was down ~3%, no longer under coverage



*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

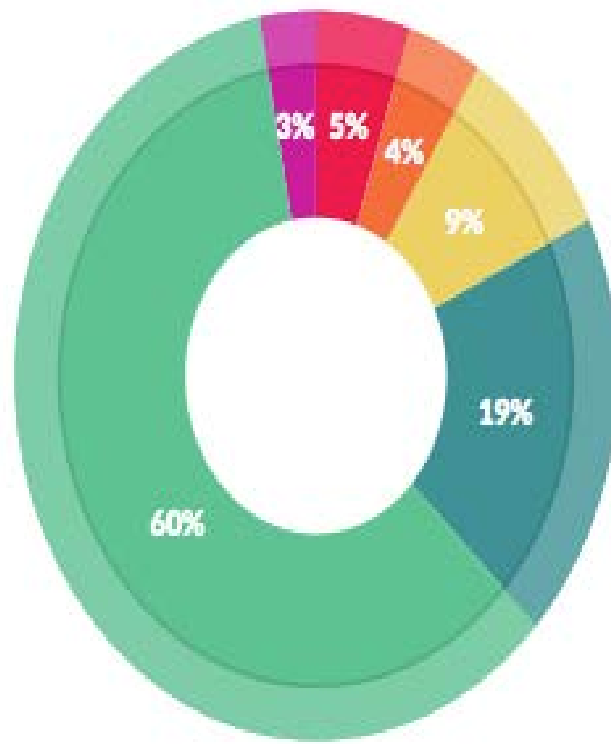
ROBO ANALYST SOLVES BIG DATA PROBLEM

“Cleaning” data is a fallacy

80% of capital and time goes to data cleaning and collection.

Data quality is too poor for AI to work.

We solve that problem with superior data.



What data scientists spend the most time doing

- Building training sets: 3%
- Cleaning and organizing data: 60%
- Collecting data sets: 19%
- Mining data for patterns: 9%
- Refining algorithms: 4%
- Other: 5%

ERNST & YOUNG's FOCUS ON ROIC

Big 4 Accounting Firm Proves Value of ROIC for Stakeholders

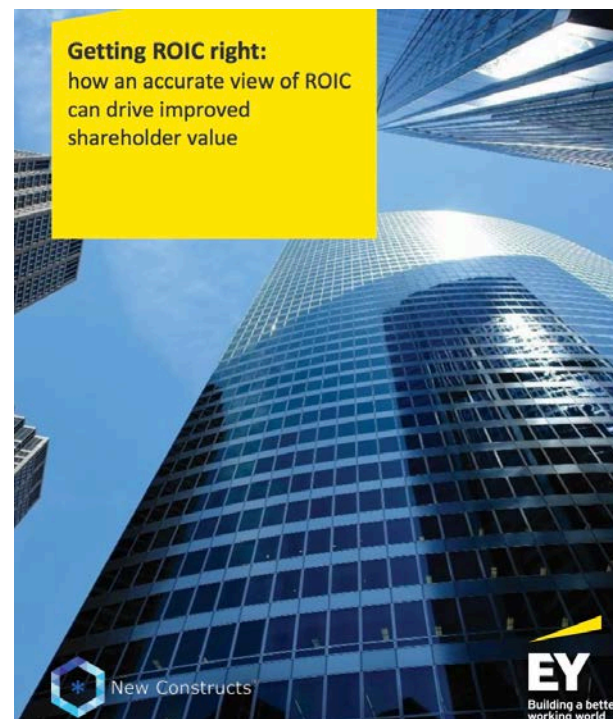
Getting ROIC right:
how an accurate view of ROIC
can drive improved
shareholder value

CLIENTS DESERVE THE BEST RESEARCH

Unrivalled Data, Transparency and Integrity

- It's not often that a big 4 accounting firm like E&Y features the material superiority of a research firm's analytics.
- **Our data is materially better. The white paper proves it.**

- The white paper provides specific examples for specific companies.
- Google "Revenue 48,778", "long-term debt 16,215" to see which company is "Peer 1".



Strategic Business Relationships

The Latest In Technology For The Best In the World

- Top hedge fund and institutional money managers
- Top wealth management firms
- Top advisors
- Top accounting, insurance & consulting firms



- **Institutions:** full access to models and tool, including database feeds. Directly access thru our website



- **Advisors/RIAs:** firm or group-wide access to unlimited research. Direct access via our website or thru partners.



- **Retail:** individual sign up for Gold, Platinum or Pro subscriptions. Direct access via our website or thru partners.

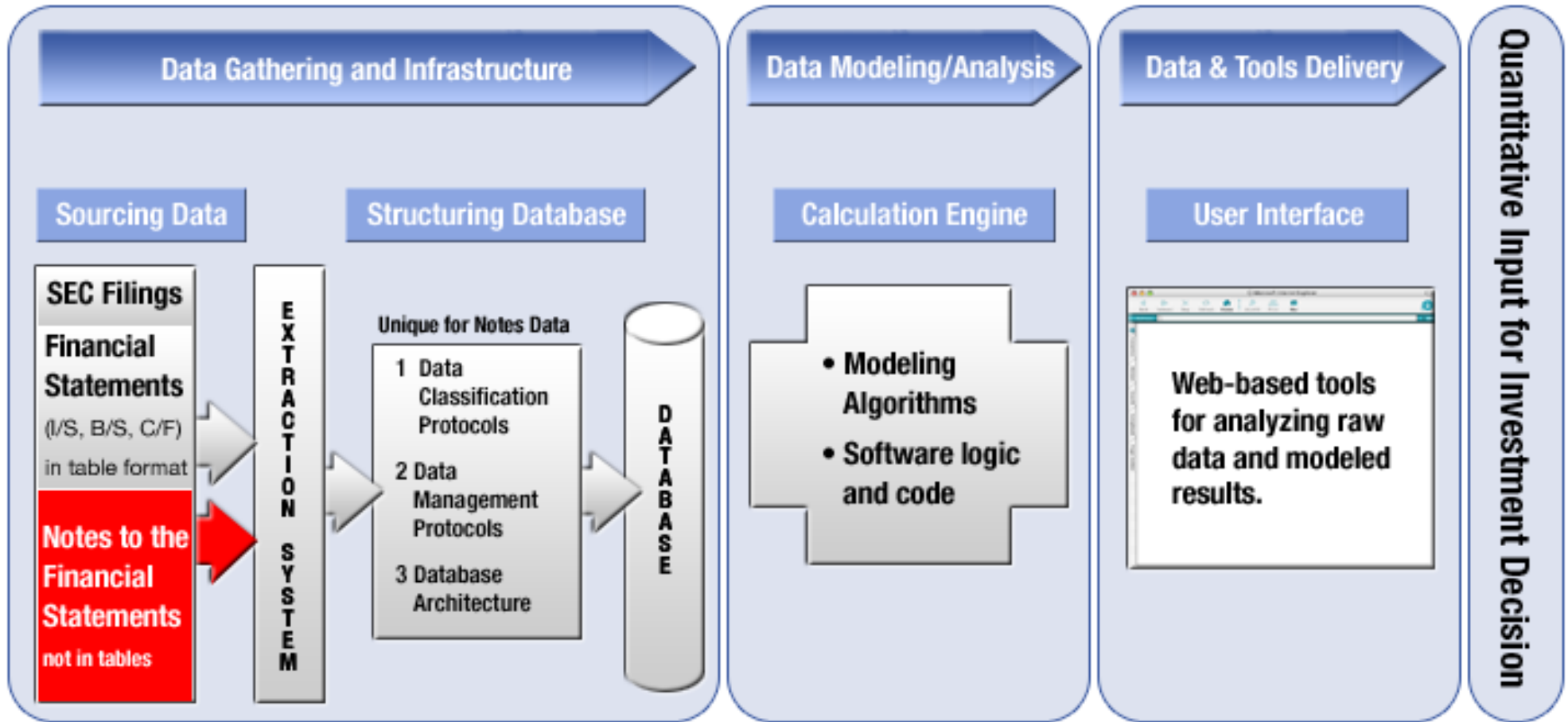


- **Consultants/Corporates:** custom engagements focused on enterprise value optimization and investor relations strategy. Direct access via our website along with custom work and consultation via partners.



RESEARCH TECHNOLOGY PLATFORM

Data Collection & Modeling Under One Roof



We created our own data collection technology to provide high integrity models to clients. Traditional data feeds are not trustworthy for sophisticated financial modeling.

VERSUS OTHER RESEARCH OFFERINGS

	Coverage			Cash Flow Focus (Non-GAAP)		Consistent Due Dilligence		Transparency/Links To		Independence	
	Stocks	ETFs	Mutual Funds	ROIC & Economic Earnings	Reverse DCF	Footnotes	MD&A	Models	SEC Filings/ Source Data	Not Paid By Funds or Companies Covered	No Banking or Trading Revenues
New Constructs	√	√	√	√	√	√	√	√	√	√	√
CFRA	limited			√	?	1/2		1/2		√	√
Credit-Suisse HOLT	√			√	√			√			
MorningStar	√	√	√	√							√
EVA Dimensions	√			√						√	√
S&P Capital IQ	√										√
Zack's	√										√
Other Sell-Side	√										
Valuentum.com	√	√						√		√	√
Finbox.io	√							√		√	√
GuruFocus	√			√						√	√
Other Firms	√									?	?

PORTFOLIO TRACKING & ALERTS

Portfolio: ThomsonONE demos

Enter tickers here.

Add

Institutional Membership



50 Portfolios
Unlimited Tickers

Edit/ Create



Alert Emails



Download CSV



Print All



Details	Ticker	Name	Type	Sector / Category	Price ¹	Mkt Val / AUM ²	Div Yield	Risk/Reward Rating ▼	Report	ROIC	FCF Yield	Price to EBV	GAP	Analyst Notes Updated ³	Remove
+	OUTR:1	Outerwall Inc.	Stock	Consumer Discretionary	\$52.00	\$895	4.6%	Very Attractive <i>Inactive</i>	↓	16%	17%	0.3	< 1	Sep 26, 2016	✖
+	XLF	State Street Select Sector SPDR Trust: Financial Select Sector SPDR Fund	ETF	Financials / Non-REIT	\$24.91	\$24,284	-	Very Attractive	↓	8%	4%	1.4	10		✖
+	GBX	Greenbrier Companies, Inc.	Stock	Industrials	\$44.70	\$1,274	2.0%	Attractive	↓	13%	6%	0.7	< 1		✖
+	AMAT	Applied Materials, Inc.	Stock	Information Technology	\$45.25	\$48,627	0.9%	Attractive	↓	21%	5%	1.4	25		✖
+	AAPL	Apple Inc.	Stock	Information Technology	\$149.50	\$779,469	1.7%	Neutral	↓	151%	7%	0.9	< 1		✖
+	DD	E.I. Dupont de Nemours & Company	Stock	Materials	\$83.98	\$72,878	1.8%	Neutral <i>Suspended</i>	↓	7%	5%	1.9	22	Jul 26, 2017	✖
+	TRI	Thomson Reuters Corp	Stock	Consumer Discretionary	\$46.06	\$34,043	3.0%	Neutral	↓	5%	4%	1.6	23		✖
+	MORN	Morningstar Inc.	Stock	Consumer Discretionary	\$83.12	\$3,568	1.1%	Neutral <i>Suspended</i>	↓	14%	-2%	1.5	6	Jul 28, 2017	✖
+	VRNT	Verint Systems, Inc.	Stock	Information Technology	\$39.70	\$2,488	-	Unattractive	↓	2%	-1%	-84.3	> 100		✖
+	SNAP	Snap Inc.	Stock	Information Technology	\$13.81	\$13,979	-	Unattractive	↓	-34%	-9%	-1.7	> 100		✖
+	QASGX	Federated MDT Series: Federated MDT Small Cap Growth Fund	Mutual Fund	Small Cap Growth	\$22.05	\$183	-	Very Unattractive	↓	12%	3%	2.9	37		✖
+	JGMAX	Janus Investment Fund: Janus Henderson Triton Fund	Mutual Fund	Small Cap Growth	\$26.91	\$8,387	-	Very Unattractive	↓	9%	0%	3.6	37	Jul 27, 2017	✖

DETAILED RATINGS, MODELS & REPORTS

Ticker:

[View Ratings](#)

[Ratings Methodology](#)

Ford Motor Company (F) Closing Price: \$11.75 (Jul 18, 2017) Dividend Yield: 5.1%

Overall Rating [?]	Quality of Earnings		Valuation		
	Econ vs Reported EPS [?]	ROIC [?]	FCF Yield [?]	Price to EBV [?]	GAP [?]
Very Dangerous	Misleading Trend	Bottom Quintile	< -5%	> 3.5 or -1 < 0	> 50
Dangerous	False Positive	4th Quintile	-5% < -1%	2.4 < 3.5 or < -1	20 < 50
Neutral	Neutral EE	3rd Quintile	-1% < 3%	1.6 < 2.4	10 < 20
Attractive	Positive EE	2nd Quintile	3% < 10%	1.1 < 1.6	3 < 10
Very Attractive	Rising EE	Top Quintile	> 10%	0 < 1.1	0 < 3
Actual Values					
F	\$0.01 vs. \$0.93	6%	4%	0.8	< 1 yr
Benchmarks					
S&P 500 (SPY)	Positive EE	18%	2%	2.3	21 yrs
Russell 2000 (IWM)	Positive EE	6%	-0%	2.8	30 yrs

[Add to Portfolio](#)

[Company Model](#)

[Download XLS](#)

[Download Report](#)

STOCK, ETF & MUTUAL FUND SCREENING

Stocks [ETFs and Mutual Funds](#) [Dynamic Data](#) [1-Click Reports](#) [Dashboards \(Beta\)](#)

Select criteria:

<p>Fund Type</p> <p><input type="checkbox"/> ETF</p> <p><input checked="" type="checkbox"/> Mutual Fund (MF)</p> <hr/> <p>Price ?</p> <p>> = [] \$ []</p>	<p>Sector</p> <p><input checked="" type="checkbox"/> Consumer Discretionary <input type="checkbox"/> Industrials</p> <p><input checked="" type="checkbox"/> Consumer Staples <input type="checkbox"/> Information Technology</p> <p><input type="checkbox"/> Energy <input type="checkbox"/> Materials</p> <p><input type="checkbox"/> Financials / Non-REIT <input type="checkbox"/> Telecom Services</p> <p><input type="checkbox"/> Financials / REIT <input type="checkbox"/> Utilities</p> <p><input type="checkbox"/> Health Care</p>	<p>Style</p> <p><input type="checkbox"/> All Cap Blend <input type="checkbox"/> Mid Cap Blend</p> <p><input type="checkbox"/> All Cap Growth <input type="checkbox"/> Mid Cap Growth</p> <p><input type="checkbox"/> All Cap Value <input type="checkbox"/> Mid Cap Value</p> <p><input type="checkbox"/> Large Cap Blend <input type="checkbox"/> Small Cap Blend</p> <p><input type="checkbox"/> Large Cap Growth <input type="checkbox"/> Small Cap Growth</p> <p><input type="checkbox"/> Large Cap Value <input type="checkbox"/> Small Cap Value</p>
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Less

<p>Overall Rating ?</p> <p><input checked="" type="checkbox"/> ● Very Attractive</p> <p><input checked="" type="checkbox"/> ● Attractive</p> <p><input type="checkbox"/> ● Neutral</p> <p><input type="checkbox"/> ● Dangerous</p> <p><input type="checkbox"/> ● Very Dangerous</p>	<p>Assets ?</p> <p>> = [] \$ 2000.0 MM</p> <hr/> <p>Provider ?</p> <p>[]</p>	<p>Initial Minimum ?</p> <p>> = [] \$ []</p> <hr/> <p>Total Annual Costs ?</p> <p>> = [] %</p>
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Filter

Download CSV ↓

Ticker	Name	Type	Category	Price ¹	Assets (MM)	Initial Min	Overall Rating	Total Annual Costs	Add to Portfolio + Add All
VCDAX	Vanguard World Funds: Vanguard Consumer Discretionary Index Fund	MF	Consumer Discretionary	\$68.79	\$2,103	\$100,000	Attractive	0.11%	+
FDTGX	Fidelity Select Portfolios: Fidelity Advisor Consumer Staples Fund	MF	Consumer Staples	\$90.41	\$2,795	\$2,500	Attractive	2.94%	+
FDCGX	Fidelity Select Portfolios: Fidelity Advisor Consumer Staples Fund	MF	Consumer Staples	\$88.77	\$2,795	\$2,500	Attractive	2.15%	+
FDIGX	Fidelity Select Portfolios: Fidelity Advisor Consumer Staples Fund	MF	Consumer Staples	\$91.99	\$2,795	\$2,500	Attractive	1.00%	+
FDFAX	Fidelity Select Portfolios: Consumer Staples Portfolio	MF	Consumer Staples	\$92.14	\$2,795	\$2,500	Attractive	0.99%	+
VCSAX	Vanguard World Funds: Vanguard Consumer Staples Index Fund	MF	Consumer Staples	\$65.54	\$3,923	\$100,000	Very Attractive	0.12%	+

Technology To Support Fulfillment of Fiduciary Duties

1. Will the rule stand?
2. What, exactly, does it take to fulfill fiduciary duties?
3. What does “fiduciary” mean = Duty of Loyalty & Duty of Care
 - **My focus is on the Duty of Care.**

The DOL has shined a light in the dark corner of investment research.



Technical research lacks rigor

- Recommendations based on a pattern on a chart?

Sell-side research is less reliable

- Conflicted? some highly publicized issues
- Diminishing resources

WHAT DEFINES “BETTER” RESEARCH

How to meet the Duty of Care

By law:

- A fiduciary must act with “care, skill, prudence, and diligence.”

Research must be:

Inarguably in best interests of clients

Research must not be:

- Conflicted
- Based on diversification
- Dependent on technicals

1. Comprehensive:

All relevant publicly-available (e.g. 10-Ks and 10-Qs) information has been diligently reviewed, including the footnotes and MD&A.

2. Un-conflicted:

Clients deserve unbiased research.

3. Transparent:

Advisers should be able to show how the analysis was performed and the data behind it.

4. Relevant:

Empirical evidence must provide [tangible, quantifiable correlation](#) to stock, ETF or mutual fund performance.

Key thought leaders support the importance of diligence.

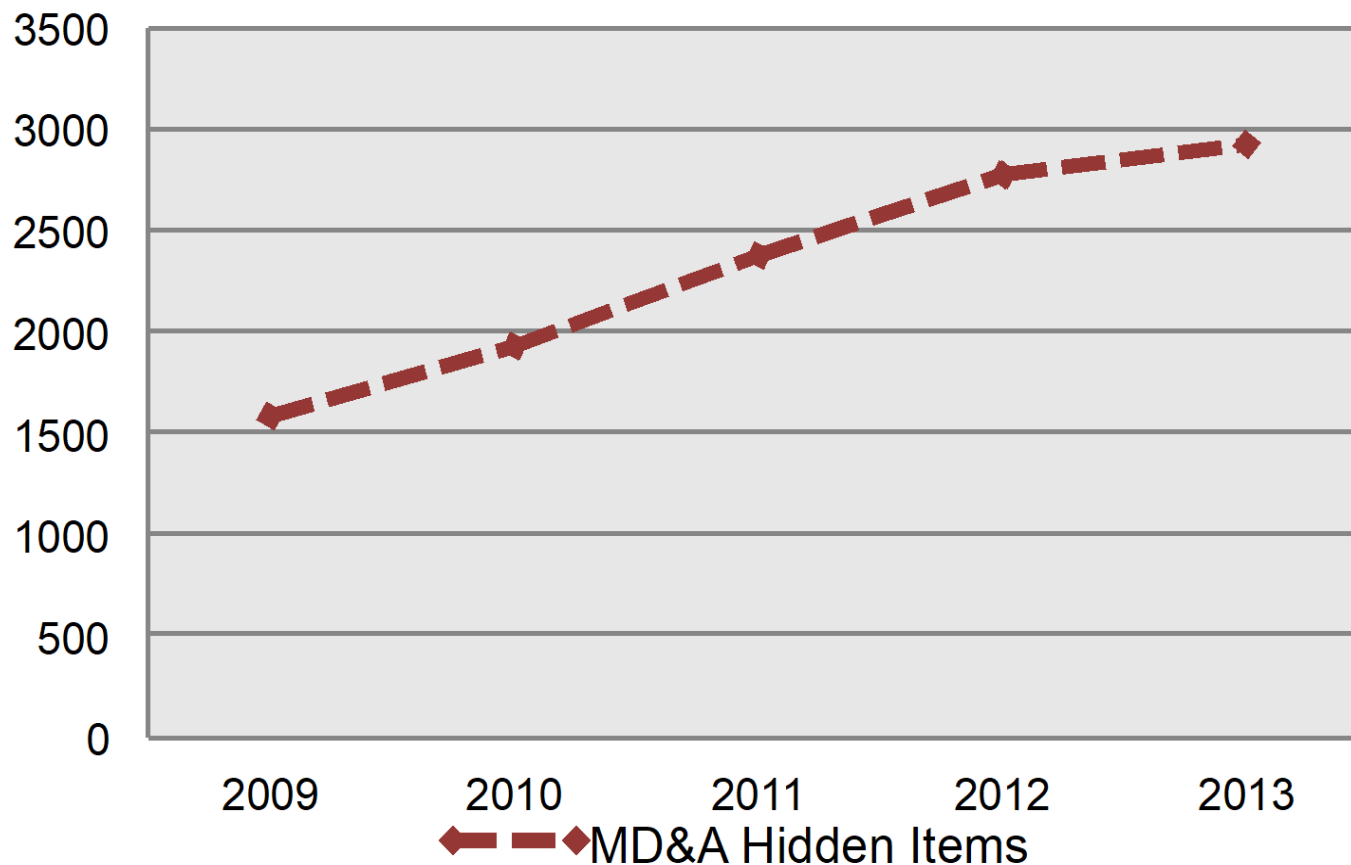
- [Michael Kitces](#)
- [MarketWatch.com](#)
- [Wealthmanagement.com](#)
- [BlackRock](#)

Regulators are too:

- [The DoL](#)

Appendix

Material Hidden Items 16% CAGR



Items found only in the MD&A (e.g. gains, charges, deferred items, etc) that distort income statement results are rising rapidly.

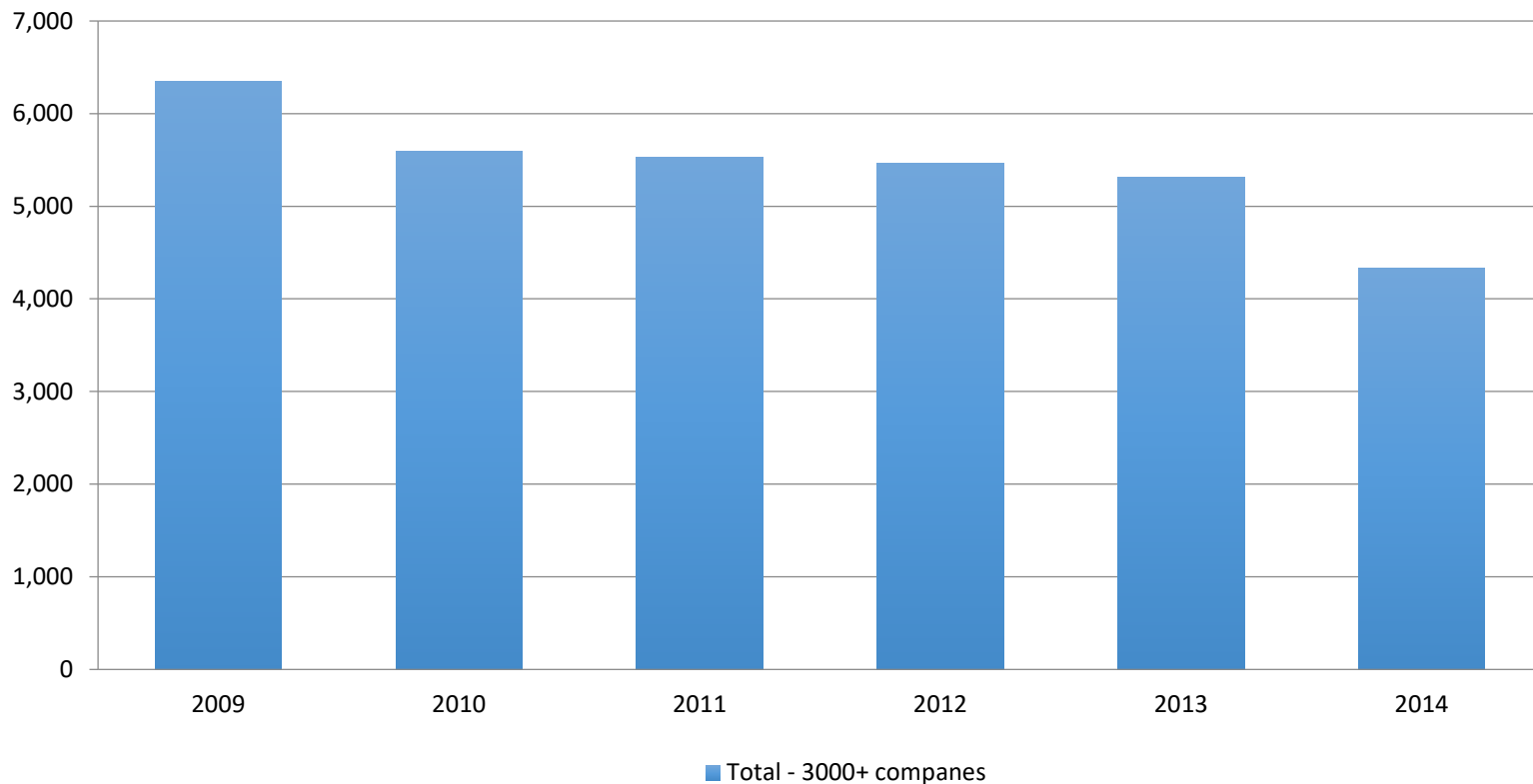
*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

ASSET WRITE-DOWNS ARE A RED FLAG

32,583

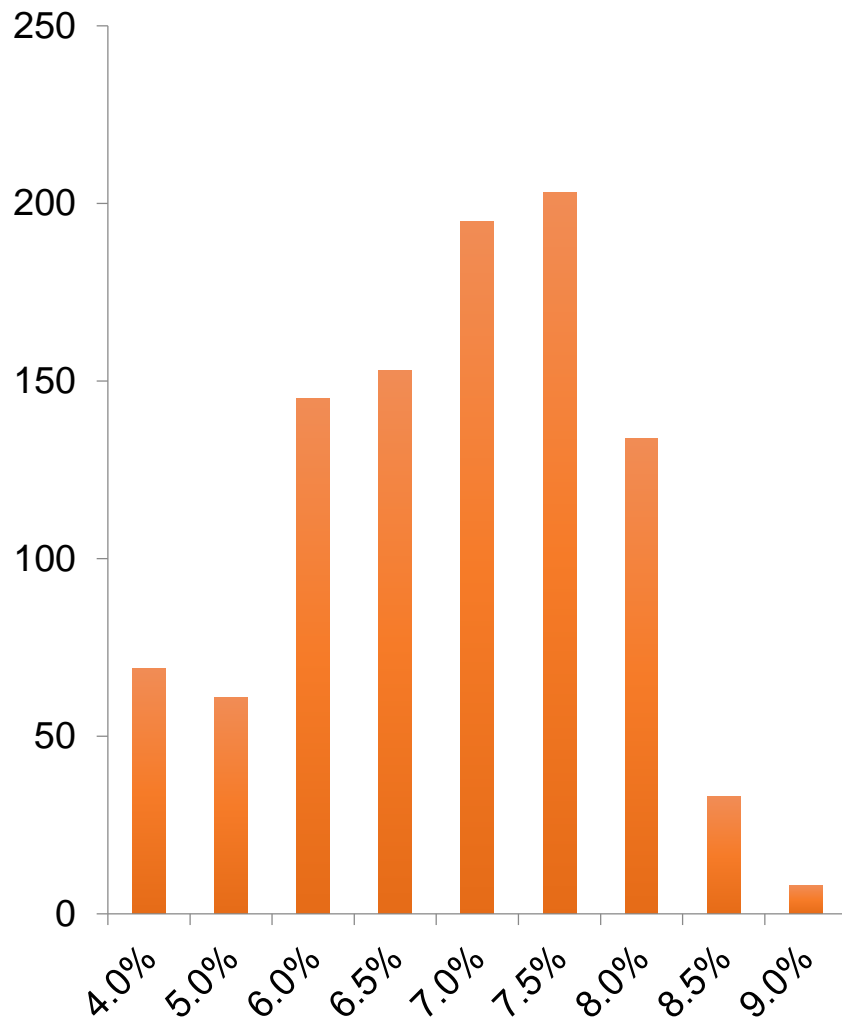
Over the last 5+ Years, we found 32,583 write-downs.

of Write-Downs



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Distribution of Return On Plan Asset Assumptions



Auditors & investors need to know this data.

- Raising the expected Return on Plan Assets (EROPA) reduces reported pension expense.
- The mean EROPA for 2014 was 6.5%. Roughly 55% of companies expect a long-term return on plan assets between 6.5% and 7.5%.
- Virtusa Corp (VRTU) has the most aggressive assumptions, with EROPA of 10.38%, followed by Exlservice Holdings (EXLS) at 9%.

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- *Morningstar gets paid by fund companies. Fund companies must license ratings from Morningstar to use them in marketing materials.*

New Constructs = unadulterated expertise in accounting, finance and SEC filings.

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