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ALPHA ARCHITECT FIRM OVERVIEW

Wesley R. Gray, PhD
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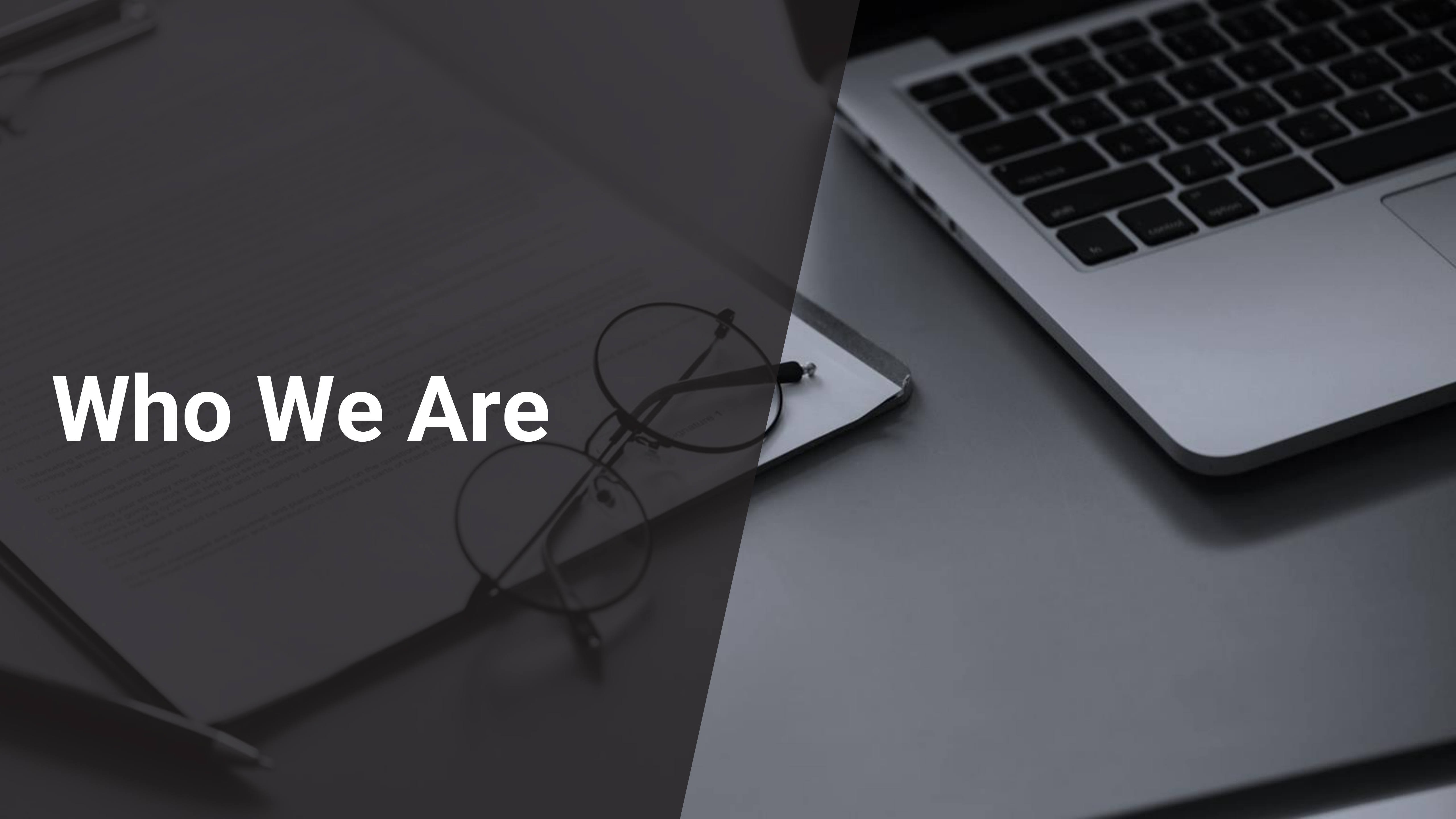
We Empower Investors Through Education | Affordable Alpha



Who We Are

Firm Mission: Empower Investors Through Education

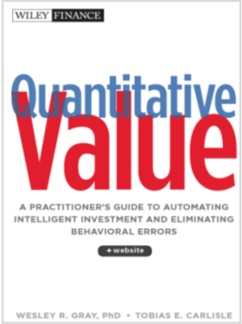
Wesley R. Gray, Ph.D. has been an active participant in financial markets throughout his career. He is the Founder, CEO and Co-CIO for Alpha Architect, an SEC-Registered Investment Advisor. Dr. Gray has published multiple academic articles and books, to include the co-authored books Quantitative Value, DIY Financial Advisor, and Quantitative Momentum.

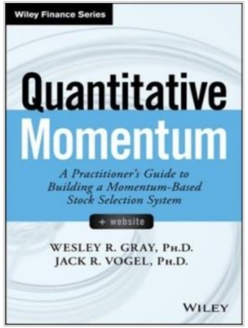
Wesley R. Gray, Ph.D.
PhD/MBA, University of Chicago
BS Economics, Wharton
Captain, Marine Corps

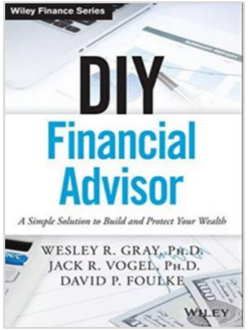
Jack Vogel, Ph.D., conducts research in empirical asset pricing and behavioral finance, and has collaborated with Dr. Gray on multiple projects. He is the CFO and Co-CIO for Alpha Architect, an SEC-Registered Investment Advisor. Dr. Vogel has published multiple academic articles and co-authored the books DIY Financial Advisor, and Quantitative Momentum.

Jack R. Vogel, Ph.D.
PhD, Drexel University
MS Mathematics, Drexel Univ.
BS Mathematics, U. of Scranton

Published multiple research-focused finance books







Published in leading, peer-reviewed academic journals

- Management Science (2018)
- Journal of Financial and Quantitative Analysis (2017)
- Journal of Investing (2014).
- Journal of Portfolio Management (2012 and 2019).

Present in major publications + editor of academic website

- Wall Street Journal (multiple articles)
- CFA Institute (multiple articles)
- Forbes (multiple articles)
- Alpha Architect (editor)

Numerous working papers (more available upon request)

- "On the Performance of Cyclically Adjusted Valuation Measures"
- "Using Maximum Drawdown to Capture Tail Risk"
- "Does Complexity Imply Value? AAII Value Strategies from 1963 to 2013"
- "Limited Attention and Asset Price Efficiency"

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Our Story is Rooted in **Research** and **Investor Education**

Research attracts $Bn+ family office

July ‘10
AUM ($M): $0

We launch our ETF business

Oct ‘14
AUM ($M): ~$100

Word gets out…


THE WALL STREET JOURNAL.

Home World U.S. Politics Economy Business Tech Markets Opinion Arts Life

Spring Rally in Stocks, Bonds, Gold and Bitcoin Unnerves Investors

Markets Rally on ECB Tapering Hopes

Was Russia's Sale of Rosneft Stake to Qatar, Glencore Just a Loan?

Popular

MARKETS | MARKETS MAIN

A Disciplined Hand Defies the Urge to Cut Losses

Wesley Gray's Alpha Architect is an upstart active investment manager that tripled its assets

Dec ‘23
AUM > $6B+

Investors like our approach

No Sales Reps. No Gimmicks. Pure Research and Education.

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Alpha Architect Business Overview

Boutique Asset Management Firm (AUM: $14B+)[1]

- Founded in 2010 as a quantitative consultant
- Launched asset management business in 2012

Research Focused

- Multiple academic book and peer-reviewed article publications
- Multiple team members have advanced degrees and qualifications (e.g., CFA or Masters/PhD)

Employee-Owned and Operated

- Employees own over 90% of the firm; seed investor owns a 5% royalty
- Strategic investor owns less than10% of the firm

Minority & Veteran Owned (Service-Disabled)

- Wesley (CEO): Choctaw Nation of Oklahoma (Roll No. 1202) & US Marine (disabled)
- Patrick (CCO/COO): US Marine (disabled)

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[1] As of 11/30/2024, and is the AUM for Alpha Architect, LLC and Empowered Funds, LLC (100% owned by Alpha Architect, LLC).

Why We Exist

FIRM IMPACT MISSION

WE EMPOWER INVESTORS THROUGH EDUCATION

Our Core Beliefs Reinforce Our Impact Mission

	OUR CORE BELIEFS		WHY IMPORTANT		MISSION
1	**Transparency,** not Black-Boxes	>	Transparency increases trust for the process	=	Sustainable investors understand the plan
2	**Evidence-Based,** not Stories	>	Evidence increases chance of success	=	Sustainable investors use data, not emotion
3	**Systematic,** not Ad-Hoc	>	Systematic eliminates human bias & costs	=	Sustainable investors stay the course
4	**Win-Win,** not Win-Lose	>	Win-Win cultures sustain long-term partnerships	=	Sustainable investors trust their advisors

Education Helps Clients Become Better Investors

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Education Develops Sustainable Investors

Our Approach		Our Clients		Our Goal
Sustainable Process	+	**Sustainable Investors**	=	**Expected Long-Term Performance**

Education is critical for cultivating long-term, sustainable investors

"Alpha" is Earned via Patience & Discipline

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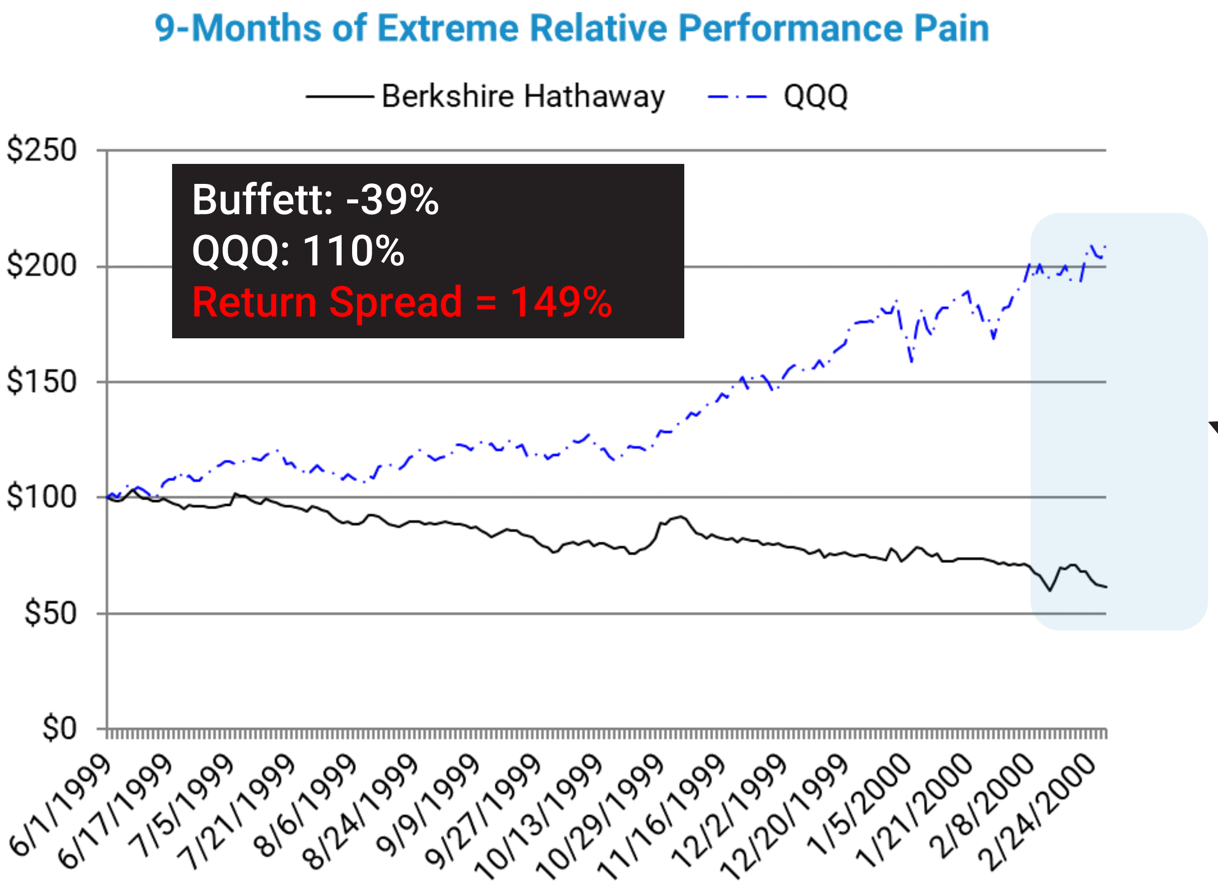
Why Does Sustainability Matter? **Good Behavior > High IQ**

We believe disciplined investors <u>earn returns</u> from less disciplined investors



"Charlie, should we buy tech?"

"Warren Buffett may be losing his magic touch."

Source: Factset. 6/1/1999 to 2/29/2000. The results are hypothetical results and are NOT an indicator of future results and do NOT represent returns that any investor actually attained. Please see disclosures for additional information. Additional information regarding the construction of these results is available upon request.

We Seek and Attract **E.D.U.C.A.T.E.D.** Clients

E	Empirical	Evidence-based. Show me the data
D	Disciplined	Long-term investors. Avoid short-term fads
U	Unassuming	Billionaires that drive Honda Civics. Disdain for flash
C	Committed	Long-term horizon. Not afraid of short-term volatility
A	Active	Not satisfied with passive index performance
T	Tax Aware	Looks for after tax results. Incorporates tax planning
E	Economical	Understands price is what you pay. Value is what you get
D	Do It Yourself	An entrepreneurial spirit. Avoids the status quo

We are NOT for everyone: Are you the right client?

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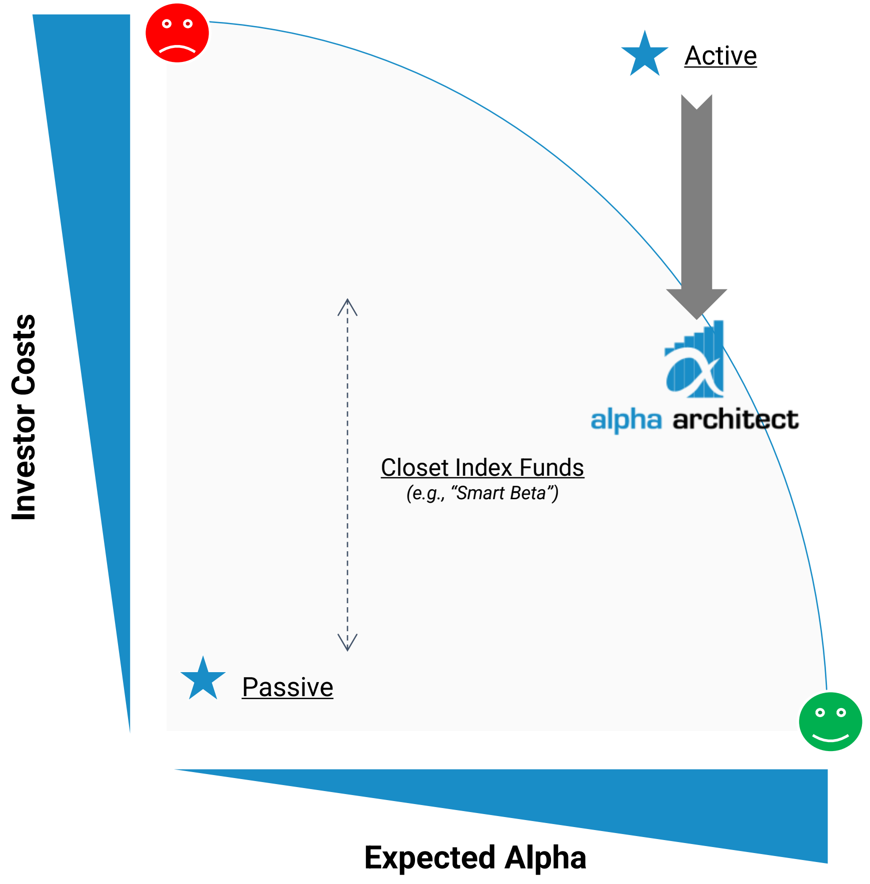
What we Do:
Affordable Alpha

What We Seek to Deliver: Affordable Alpha

We believe active management works…if it's affordable



Why we believe our value proposition works

Affordable

- Our products are bought, not sold, which minimizes distribution costs
- We do more with less via low overhead and technology
- We focus on tax-efficient investment solutions

Alpha

- We have strong research capabilities and experience
- We are willing to be different: high active-share and concentration
- We invest in our own products and maintain a long-term perspective (i.e., strong incentive alignment)

Affordable Alpha

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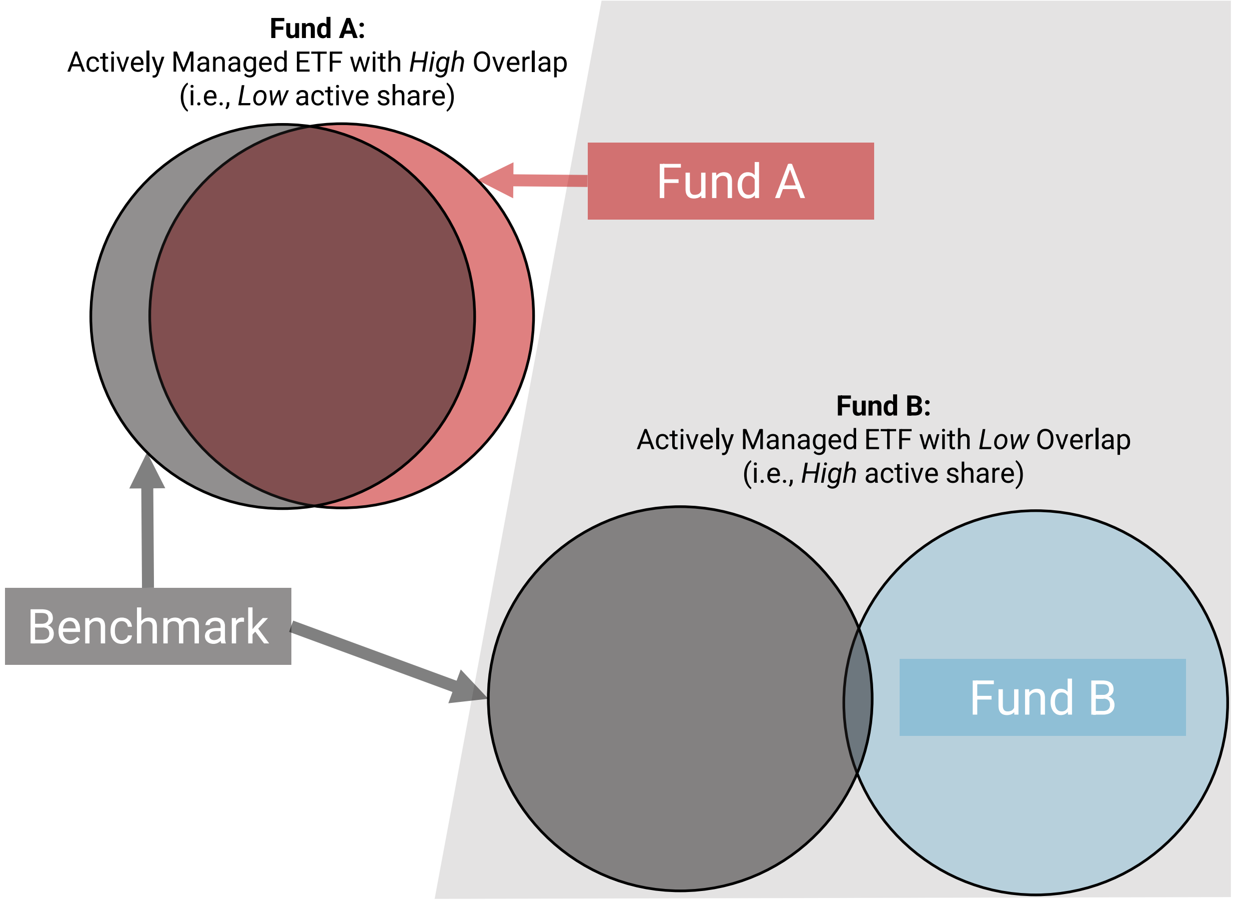
We Seek Differentiation and Avoid "Closet-Indexing."[1]

Why Pay Fees for High Overlap with a Benchmark?



NY Attorney General Comments on Closet-Indexing[2]

- "Investors who choose to buy actively managed funds…*should seek to understand what additional value* they may obtain in exchange for higher fees."
- *"Active Share helps investors discern the overlap* between an actively managed fund and the fund's corresponding benchmark index…"
- "Similarly, Active Share *may help an investor assess* whether a fund's fees are acceptable."
- *"Investors should seek to understand the Active Share* metric and request Active Share information from their brokers or mutual fund providers if it is not publicly available."

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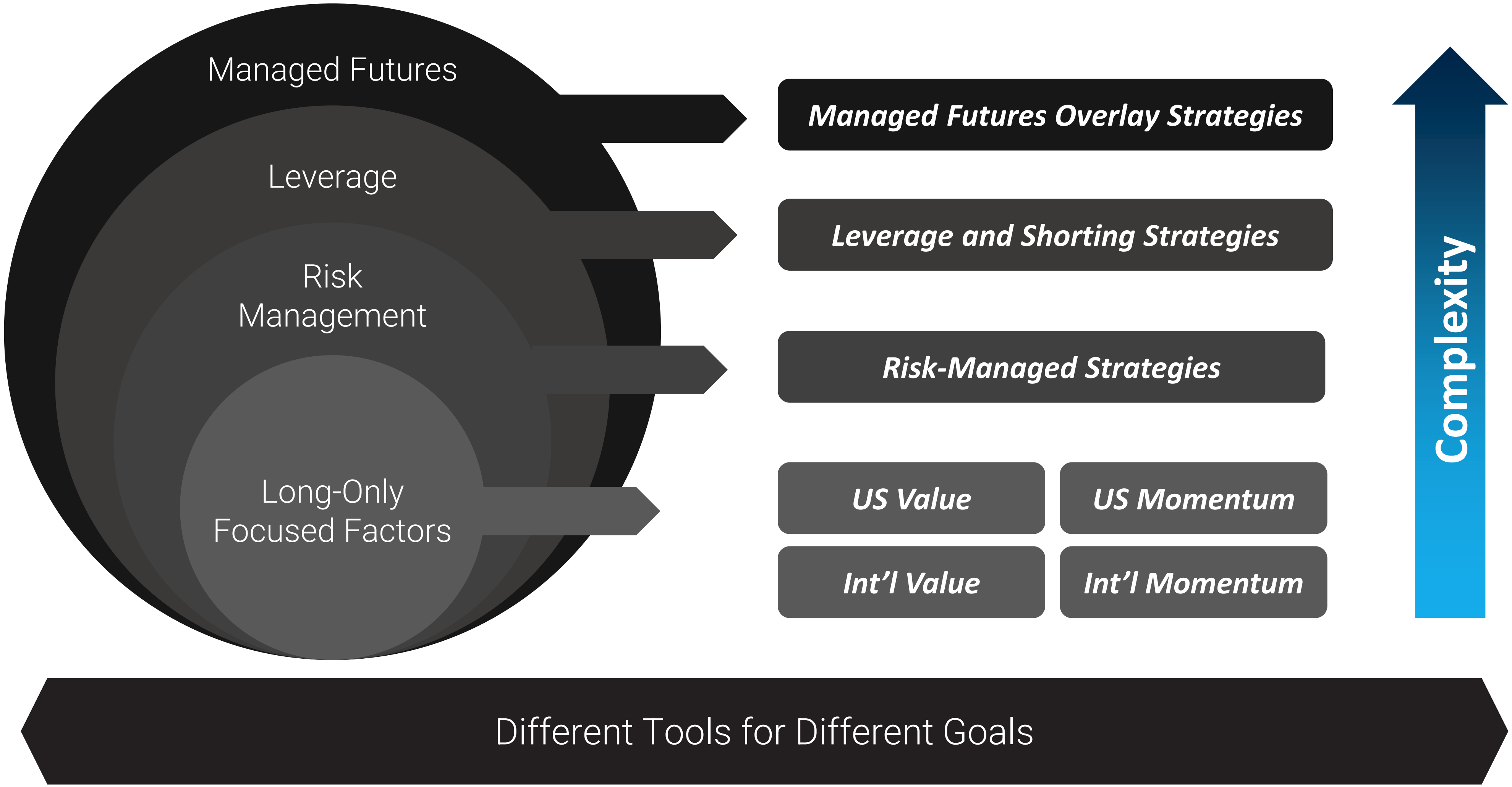
[1]K.J. Martijn Cremers & Quinn Curtis, Do Mutual Fund Investors Get What They Pay For? The Legal Consequences of Closet Index Funds (November 24, 2015) at 1, available at http://ssrn.com/abstract=2695133 ("Cremers & Curtis (November 2015)") (last visited March 28, 2018). "Closet indexing" is a term used to describe funds that claim to actively purchase investments but wind up with a portfolio not much different from the benchmark.
[2]April 2018, "Mutual Fund Fees and Active Share" authored by the State of New York Attorney General. Accessed 12/23/2020.

Our Strategies Leverage Our Research Capabilities



*Managed futures are only available for Qualified Eligible Persons.

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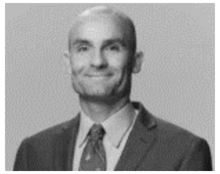
Appendix

Firm Managing Members

	Name	Position	Recent Experience	Education
	Wes Gray	CEO/CIO	Alpha Architect (2010-Present) Drexel Finance Professor (2010-2014) US Marine Corps Captain (2004-2008)	Ph.D./M.B.A. Finance, University of Chicago Booth School of Business B.S. The Wharton School of the University of Pennsylvania, magna cum laude Series 65 and 3 licenses
	Jack Vogel	CFO/CIO	Alpha Architect (2011-Present) Mathematics Instructor (2008-2009)	Ph.D. Finance, LeBow College of Business, Drexel University M.S. Mathematics, Drexel University B.S. Mathematics, University of Scranton, summa cum laude Series 65 license and 3 licenses
	Patrick Cleary	CEO, ETF Architect	Alpha Architect (2014-Present) Algeco Scotsman (2014) The Boston Consulting Group (2010-2014) US Marine Corps Captain (2004-2008)	M.B.A Harvard University B.S. The Wharton School of the University of Pennsylvania, cum laude M.S. Cybersecurity, Webster University (2018) Series 65 license CFA Level III Candidate
	Ryan Kirlin	President	Alpha Architect (2017- present) Revenue Shares (2013-2017) NYSE (2009-2013)	B.A. Economics, Fordham University CFA Level II Candidate Series 65 license

Alpha Architect Corporate Structure

Entity Structure

Empirical Finance, LLC
"Holding Company"

Alpha Architect, LLC
"Alpha Architect"
CRD: 153905
NFA: 0480044

Empowered Funds, LLC
"ETF Architect"
CRD: 171412

EA Series Trust

Entity Narrative

- Empirical Finance, LLC is our top-level entity and owns 100% of Alpha Architect, LLC. Alpha Architect, LLC owns 100% of Empowered Funds, LLC.
- Alpha Architect, LLC is an advisor entity that manages/maintains intellectual property and strategy distribution and does business as "Alpha Architect."
- Empowered Funds, LLC is an advisor entity that serves as an ETF white label servicing company and does business as "ETF Architect" or "EA Series Trust." Alpha Architect hires ETF Architect to operate its own ETFs.

Ownership Table

Owner	%
Wesley Gray	59.39%
Jack Vogel	15.10%
Pat Cleary	13.85%
Dave Babulak	8.01%
Other	<5%

We are Thought Leaders in Quant and Factor Investing

We Publish Peer-reviewed Research

Contribute To National Outlets

THE WALL STREET JOURNAL. THE EXPERTS

ETF.com

CFA Institute

YAHOO! FINANCE

Forbes

And Our Approach Is Making News

The Motley Fool Fool.com

SSRN

Kiplinger

Bloomberg

ETF.com

MORNINGSTAR

FT

FOX NEWS

FOX BUSINESS

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IMPORTANT INFORMATION - DISCLOSURES

There are risks involved with investing, including loss of principal. There is no assurance that the objectives of any strategy or fund will be achieved or will be successful. No investment strategy, including diversification, can protect against market risk or loss. Current and future portfolio holdings are subject to risk. Past performance does not guarantee future results.

There is a risk of substantial loss associated with trading commodities, futures, options and other financial instruments. Before trading, investors should carefully consider their financial position and risk tolerance to determine if the proposed trading style is appropriate. Investors should realize that when trading futures, commodities and/or granting/writing options one could lose the full balance of their account. It is also possible to lose more than the initial deposit when trading futures and/or granting/writing options. All funds committed to such a trading strategy should be purely risk capital.

Certain economic and market information contained herein has been obtained from published sources prepared by other parties, which in certain cases have not been updated through the date hereof. While such sources are believed to be reliable, neither Alpha Architect nor its affiliates assumes any responsibility for the accuracy or completeness of such information and such information has not been independently verified by Alpha Architect.

Index returns are for illustrative purposes only and do not represent actual fund performance. References to an index do not imply that the portfolio will achieve returns, volatility or other results similar to that index. The composition of the index may not reflect the manner in which a portfolio is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility or tracking error targets, all of which are subject to change. Index performance returns do not reflect any management fees, transaction costs, or expenses, which would reduce returns.

Indexes are unmanaged and one cannot invest directly in an index. There are no active components of indexes; therefore, using them as a proxy can be of limited value because there is no guarantee that the portfolio would have been managed to match the index. Realized returns and/or volatility may come in higher or lower than expected.

Annual performance is calculated based on monthly return streams, geometrically linked as of the end of the specified month end.

Results, unless cited otherwise, are shown gross of fees and do not reflect the effect of investment fees which would lower performance. Performance reflects the reinvestment of dividends and other earnings. The following hypothetical illustrates the compound effect fees have on investment return: For an account charged 1% with a stated annual return of 10%, the net total return before taxes would be reduced from 10% to 9%. A ten year investment of $100,000 at 10% would grow to $259,374, and at 9%, to $236,736 before taxes. For a complete description of all fees and expenses, please refer to Alpha Architect's Form ADV Part 2A.

IMPORTANT INFORMATION - DISCLOSURES

Performance figures contained herein are hypothetical, unaudited and prepared by Alpha Architect, LLC; hypothetical results are intended for illustrative purposes only.

Past performance is not indicative of future results, which may vary.

Hypothetical performance results (e.g., quantitative backtests) have many inherent limitations, some of which, but not all, are described herein. No representation is being made that any fund or account will or is likely to achieve profits or losses similar to those shown herein. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently realized by any particular trading program. One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or adhere to a particular trading program in spite of trading losses are material points which can adversely affect actual trading results. The hypothetical performance results contained herein represent the application of the quantitative models as currently in effect on the date first written above and there can be no assurance that the models will remain the same in the future or that an application of the current models in the future will produce similar results because the relevant market and economic conditions that prevailed during the hypothetical performance period will not necessarily recur. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the preparation of hypothetical performance results, all of which can adversely affect actual trading results. Hypothetical performance results are presented for illustrative purposes only.

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IMPORTANT INFORMATION - DISCLOSURES

- Simulated Historical Performance: All returns are total returns and include the reinvestment of distributions (e.g., dividends).
- Index Characteristics Data Source: Characteristics are from FactSet and derived via the ETFs that track the respective Indexes. Characteristics are holdings-weighted. The data for the performance and factor attribution analysis are from Alpha Architect and Solactive.
- The S&P 500 Index (SP500) is a capitalization-weighted index that measures the performance of the broad U.S. equity market.
- The MSCI EAFE Index (EAFE) is a capitalization-weighted index that measures the performance of developed market equities, excluding the U.S. and Canada.
- The MSCI World Index is a capitalization-weighted index that measures the performance of developed market equities.
- EBIT/TEV is defined as earnings before interest and taxes divided by total enterprise value.
- Momentum (2-12) is defined as the cumulative total return for the past 12 months, excluding the last (12th) month.
- Size is defined as the total market value of the company's listed equity.
- Return on assets is defined as net income divided by total assets.
- Compound annualized growth rate, or CAGR, is defined as the annualized growth of an initial investment to the ending investment value if you assume that the investment has been compounding over the time period.
- Standard Deviation: Sample standard deviation
- Downside Deviation: Sample standard deviation, but only monthly observations below 41.67bps (5%/12) are included in the calculation
- Sharpe Ratio (annualized): Average monthly return minus treasury bills divided by standard deviation
- Sortino Ratio (annualized): Average monthly return minus treasury bills divided by downside deviation
- Appraisal Ratio (annualized): CAPM regression intercept estimate divided by regression residual volatility
- Worst Drawdown: Worst peak to trough performance (measured based on monthly returns)
- Rolling X-Year Win %: Percentage of rolling X periods that a strategy outperforms
- Sum (5-Year Rolling MaxDD): Sum of all 5-Year rolling drawdowns
- Down %: The Down Number Ratio is a measure of the number of periods that the investment was down when the benchmark was down, divided by the number of periods that the benchmark was down. The smaller the ratio, the better
- Up %: The Up Number Ratio is a measure of the number of periods that the investment was up when the benchmark was up, divided by the number of periods that the benchmark was up. The larger the ratio, the better
- Tracking Error: Tracking Error is measured by taking the square root of the average of the squared deviations between the investment's returns and the benchmark's returns
- Negative Correlation: Correlation of returns relative to benchmark returns when the benchmark is negative
- Positive Correlation: Correlation of returns relative to benchmark returns when the benchmark is positive
- Performance figures contained herein are hypothetical, unaudited and prepared by Alpha Architect, LLC; hypothetical results are intended for illustrative purposes only. Past performance is not indicative of future results, which may vary. Index returns are for illustrative purposes only and do not represent actual fund performance. Index performance returns do not reflect any management fees, transaction costs, or expenses, which would reduce returns. Indexes are unmanaged and one cannot invest directly in an index.

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JOIN US!

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