AN INTRODUCTION TO ALPHA ARCHITECT

Wesley R. Gray, PhD
T: +1.215.882.9983
F: +1.216.245.3686
ir@alphaarchitect.com
213 Foxcroft Road
Broomall, PA 19008

As Of Date: 5/31/2019
Our Firm Impact Mission and Passion: We Empower Investors Through Education

In order to Develop Sustainable Investors
Investors Embrace Client Education and Our Philosophy

Blog attracts $Bn+ family office

We launch our ETF business

Word gets out...

July ‘10
AUM ($M): $0

Oct ‘14
AUM ($M): ~$100

May ‘18
AUM > $1B

No sales reps. No gimmicks. Pure education.

Source: Figures as of 6/15/2018
Education Develops Sustainable Investors

Our Approach

Sustainable Process

+ Sustainabe Investors

Our Clients

Our Goal

Expected Long-Term Performance

Education is critical for cultivating long-term, sustainable investors

“Alpha” is Earned via Patience & Discipline
Why Does Sustainability Matter? Ask Warren Buffett!
Disciplined investors earn risk premiums from less disciplined investors

**Buffett:** -39%
**SP500:** 7%
**QQQ:** 110%

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.
Our Core Beliefs **Reinforce** Our Mission

<table>
<thead>
<tr>
<th>Our beliefs</th>
<th>Why important</th>
<th>Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Transparency, no Black-Boxes</strong></td>
<td>Transparency increases trust for the process</td>
<td>Sustainable investors understand the plan</td>
</tr>
<tr>
<td><strong>2. Evidence-Based, not Story-Based</strong></td>
<td>Evidence increases chance of success</td>
<td>Sustainable investors use data, not emotion</td>
</tr>
<tr>
<td><strong>3. Systematic, not Ad-Hoc</strong></td>
<td>Systematic eliminates human bias &amp; costs</td>
<td>Sustainable investors stay the course</td>
</tr>
<tr>
<td><strong>4. Win-Win, not Win-Lose</strong></td>
<td>Win-Win culture builds long-term partnerships</td>
<td>Sustainable investors build a winning team</td>
</tr>
</tbody>
</table>

Sustainable Investors can Exploit Sustainable Processes
WHAT WE DO: AFFORDABLE ALPHA
Alpha Architect Seeks to Deliver “Affordable Alpha”

Why our value proposition works

**Affordable**
- AA is bought...not sold, which **minimizes distribution costs**
- We do more with less via **low overhead and technology**
- We are very tax-aware and focus on tax-efficient investment solutions

**Alpha**
- We **conduct exhaustive research**
- Our portfolios are **anti-closet index**
- Our strategies have **limited capacity**

Active management works better...if it’s affordable

**Expected Alpha**

Become the “Vanguard” of Unique, Non-Scalable Ideas
**Our Business Model Helps Clients Win**

We are built for tax-sensitive, independent, long-term investors…we are NOT for everyone

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive Index</td>
<td>No</td>
<td>Likely – Very cheap</td>
<td>Low</td>
<td>Yes</td>
<td>Good for the masses</td>
</tr>
<tr>
<td>Closet Index or “Smart Beta”</td>
<td>No</td>
<td>Maybe</td>
<td>High</td>
<td>Yes</td>
<td>Good at the right price</td>
</tr>
<tr>
<td>Active</td>
<td>Yes</td>
<td>Unlikely – Too expensive</td>
<td>High</td>
<td>Limited</td>
<td>Not sustainable after-tax and fees</td>
</tr>
</tbody>
</table>

---

**Active Investing that Seeks to Achieve a Win-Win**

- Yes
  - We are different
- Yes
  - Less than active & tax efficient
- Low
  - Minimal middlemen
- Limited
  - Educated investors

Sustainable
Strategies: Different layers of complexity for different goals

Different Tools for Different Goals
Strategy details

- **Focused Factor Investing**
  - Concentrated Value and Momentum
    - *(No closet indexing allowed!)*
  - ETFs and Managed Accounts

- **Tax-Efficient Alternatives**
  - Long/Short Equity & Mgd. Futures
    - *(multi-strategy)*
  - ETFs, Hedge Fund, IDF, Managed Accounts

- **Tactical Asset Allocation**
  - Robust Asset Allocation
    - *(A turnkey portfolio solution)*
  - Automated Managed Accounts

Built for tax-sensitive, independent, long-term investors
We Attract **E.D.U.C.A.T.E.D.** Clients

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

We are NOT for everyone: Are you the right client?
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Recent Experience</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Drexel Finance Professor (2010-2014)</td>
<td>School of Business</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US Marine Corps Captain (2004-2008)</td>
<td>B.S. The Wharton School of the University of Pennsylvania, magna cum laude</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Series 65 and 3 licenses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mathematics Instructor (2008-2009)</td>
<td>University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.S. Mathematics, Drexel University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B.S. Mathematics, University of Scranton, summa cum laude</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Series 65 license and 3 licenses</td>
</tr>
<tr>
<td>Tao Wang</td>
<td>Portfolio Manager</td>
<td>Alpha Architect (2012-Present)</td>
<td>M.S., Finance, Drexel University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B.A., B.L., Shanghai University of Finance &amp; Economics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Series 65 and 3 licenses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CFA Charter Holder</td>
</tr>
<tr>
<td>Patrick Cleary</td>
<td>COO/CCO</td>
<td>Alpha Architect (2014-Present)</td>
<td>M.B.A Harvard University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Algeco Scotsman (2014)</td>
<td>B.S. The Wharton School of the University of Pennsylvania, cum laude</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CFA Level II Candidate</td>
</tr>
<tr>
<td>Brandon Koepke</td>
<td>CTO / Capital</td>
<td>Alpha Architect (2017-Present)</td>
<td>B.S. Computer Science, University of Calgary</td>
</tr>
<tr>
<td></td>
<td>Markets</td>
<td>Strawhouse Labs (2017)</td>
<td>B.C. Finance, University of Calgary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amazon (2015-2016)</td>
<td>CFA Level III Candidate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disney (2014-2015)</td>
<td></td>
</tr>
<tr>
<td>Ryan Kirlin</td>
<td>Head of Capital</td>
<td>Alpha Architect (2017- present)</td>
<td>B.A. Economics, Fordham University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NYSE (2009-2013)</td>
<td></td>
</tr>
<tr>
<td>Kyle Baxter</td>
<td>Director, Portfolio</td>
<td>Alpha Architect (2017 – present)</td>
<td>M.S. Finance, Baruch College</td>
</tr>
<tr>
<td></td>
<td>Services</td>
<td></td>
<td>B.S. Chemistry, University of Maryland</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Passed CFA Level III Exam</td>
</tr>
</tbody>
</table>
We are Thought Leaders in Quant and Factor Investing

We publish peer-reviewed research...

...contribute to national outlets...

...and our approach is making news
Firm AUM Growth (As of 9/30/2018)

Alpha Architect AUM Growth (Start: 1/1/2013)

Source: Alpha Architect
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.

Neither Alpha Architect nor its affiliates provide tax advice. IRS Circular 230 disclosure: To ensure compliance with requirements imposed by the IRS, we inform you that any tax advice contained in this communication was not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or (ii) promoting, marketing or recommending to another party any matters addressed herein. You should seek advice based on your particular circumstances from an independent tax advisor.

The information contained in this communication is not meant to substitute for a thorough estate planning and is not meant to be legal and/or estate advice. It is intended to provide you with a preliminary outline of your goals. Please consult your legal counsel for additional information.

This presentation is only intended for pre-approved presentations and may not be duplicated in any form by any means or redistributed without Alpha Architect’s prior written consent.
**Strategy Background for Warren Buffett Slide**

- **Simulated Historical Performance:** 1/1/1994 to 12/31/1999

- All returns are total returns and include the reinvestment of distributions (e.g., dividends)
- Gross of all fees and transaction costs
- From Ken French Website: [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html)

- Legend
  - **Value Stocks** = Top Decile B/M
  - **SP500** = S&P 500 Total Return Index
  - **RF** = Treasury Bill Total Return Index

- Hypothetical performance results have many inherent limitations, some of which, but not all, are described in the disclosures at the end of this document. 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.

- Indexes are unmanaged, do not reflect management or trading fees, and one cannot invest directly in an index.

- Please see the disclosures at the end of this document for additional information.