Custom Indexing: The Next Evolution of Index Investing

BY PATRICK O'SHAUGHNESSY: DECEMBER 2020

CANVAS®: Request a demo of our Custom Indexing platform HERE

By 2025, most financial advisors will use web-based software to create and manage *Custom Indexes* for their clients. Standard indexes have a single methodology; one ruleset dictating what they own and how they rebalance. Standard indexes are "one size fits all." Like standard indexes, Custom Indexes also invest and rebalance according to a defined methodology. But with Custom Indexes, the methodology is personalized based on an investor's circumstances and preferences and can be easily adjusted as an investor's circumstances change. This flexibility is possible because Custom Indexes are implemented through separate accounts, where investors can directly own a custom mix of individual stocks and bonds rather than indirectly owning positions through a collection of funds and ETFs.

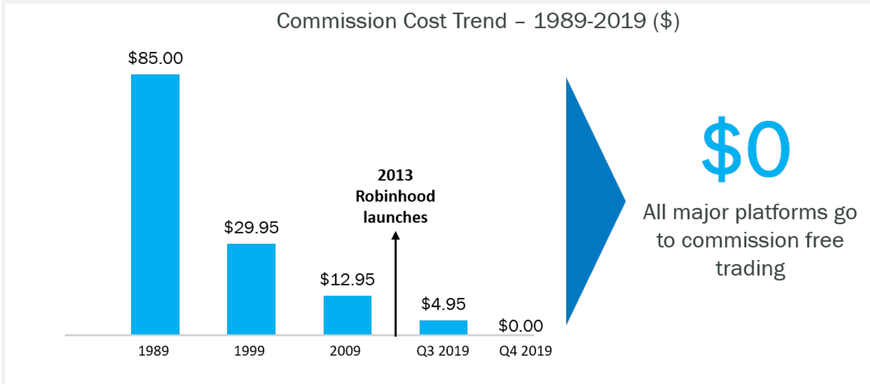
Custom Indexing is a *technology,* and technology often removes barriers. Co-mingled funds and ETFs sit in between investors and the stocks they own. Funds and ETFs have been good to investors and were wonderful technologies in their own rights. But Custom Indexing software, zero commission trading, and fractional share trading mean that in the future, more investors will own their shares directly rather than through mutual funds and ETFs.

If what we've seen with *Canvas* (O'Shaughnessy Asset Management's Custom Indexing platform, now one year old) is any indication of the future, Custom Indexes will be built using dynamic software, typically starting with broad market exposure (i.e. beta) and then accounting for each investor's needs in areas like taxes and tax treatment, desired returns, income, risk exposures, ESG, and more.

Custom Indexing will win significant share from simple indexing and Direct Indexing because it will continue to offer the benefits of its predecessors (low cost and tax friendly) while layering in significant new benefits.

An Inevitable Future

Custom Indexing is a great example of a new product which sits on what my friend Josh Wolfe calls a "directional arrow of progress." In technology, we can observe trend lines, arrows of progress, that show improvement in key product dimensions that matter to customers (often cost, speed, convenience, selection, and personalization). Because technology tends to advance consistently (and often, exponentially), it's often safe to extrapolate these technology-based trends into the future. A simple example in the world of investing is the cost (commission) of a single-stock trade for retail investors. Costs marched steadily downwards until Robinhood jumped the line and brought them to zero. The other major brokerage platforms had to follow suit.

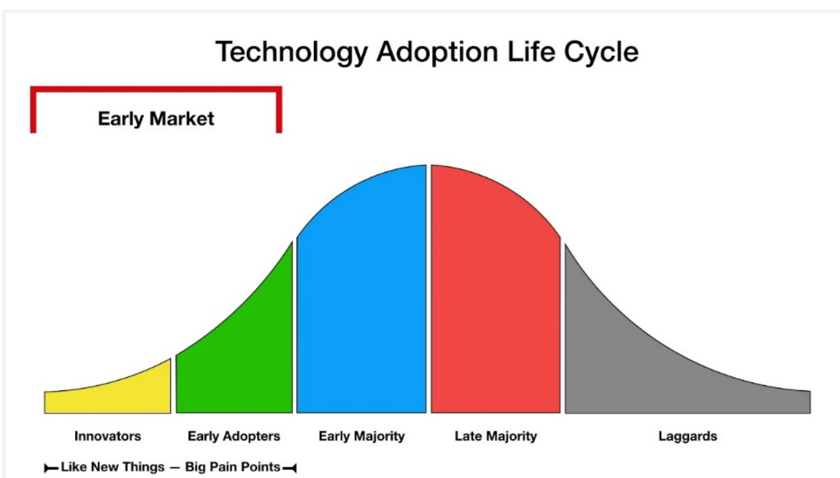


Source: Charles Schwab. *Fall Business Update*

When we launched OSAM in 2007, we began ripping out third-party software and technology solutions because they did not meet our needs. We slowly built our own software and research-technology stack piece by piece. This build out put us in a unique position to develop the first Custom Indexing platform, as we were able to build it *on top* of the software infrastructure we'd laid previously. Because we were first to this new market with Canvas, we've seen the future of how Custom Indexing will work:

Each advisory firm that we've worked with started by making their own set of Custom Index strategy templates which reflect their firm's investing views *(see summary box on pg 4 for template examples)*. You can think of these like a basic set of blueprints which a home builder uses repeatedly before tweaking each home to the needs and tastes of the homeowner. Each firms' templates are different than the others, which highlights the power of a fully customizable platform. After building their strategy templates, our advisor firms have further tailored strategy rules at the individual account level based on specific client circumstances and preferences.

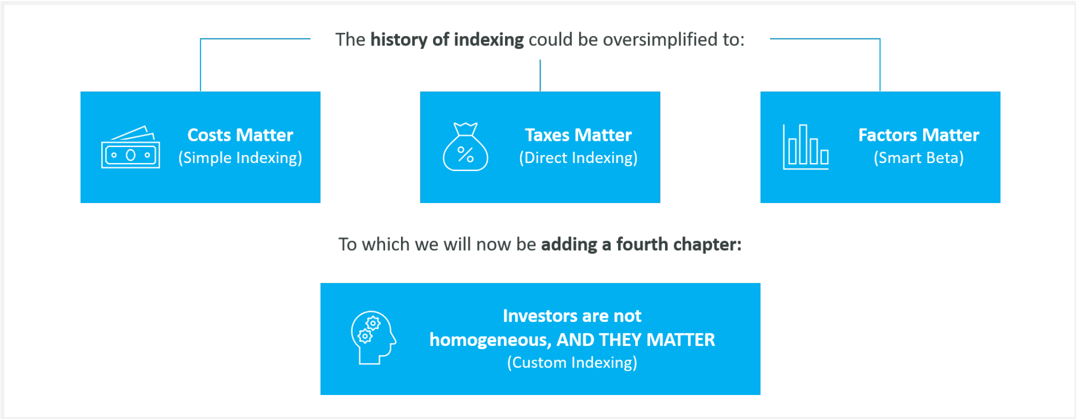
Today, when you extrapolate the trend lines in portfolio management, the natural conclusion for where we are heading is Custom Indexing. We are seeing the most advanced RIAs begin to consider and adopt Custom Indexing solutions. In the commonly used "technology adoption curve" shown below, the "innovators" have started using Custom Indexes. Soon, we'll begin working with "early adopters." But before too long, some advisors will be playing catch up, as the ability to build a customized strategy will be table stakes for winning new clients and continuing to improve relationships with existing clients.



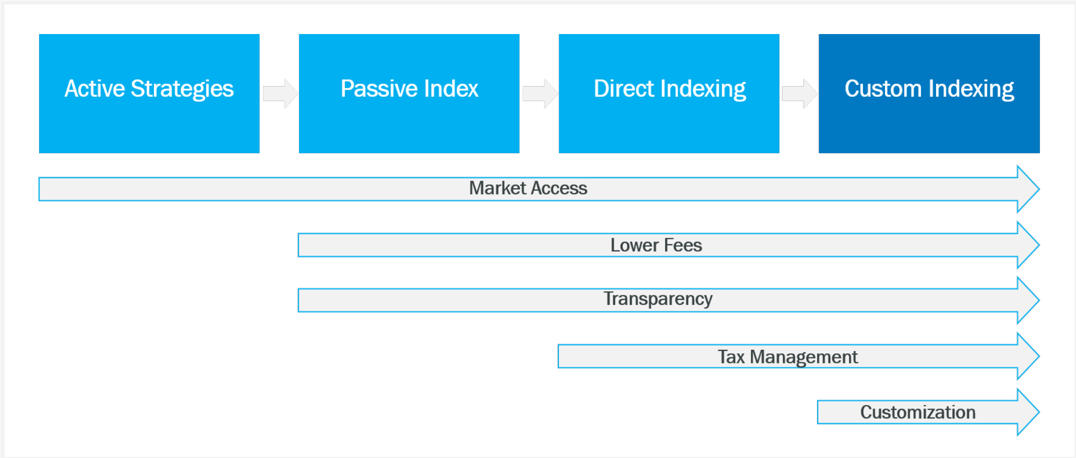
Source: YouTube. J Scott Christianson. *Technology Adoption Life Cycle*

I often find it helpful to squint and look out five to ten years, rather than focusing on the next year or two. This makes certain things easier to predict. In this case, can anyone imagine a world where Custom Indexing *doesn't* dominate? I find it very hard to imagine because most of the frictions that would have stopped Custom Indexing as a practice – mostly in the form of dollar costs and manual workflows – have already disappeared. Because we believe this is an inevitability, we believe that the top advisors should be thinking about how they will embrace this new technology *now.*

How We Got Here



Each simple step in the indexing progression builds on the last. Direct Indexing carried forward the low-cost benefits of simple indexing, and Custom Indexing will carry forward the benefits of low costs *and* tax-loss harvesting.



Once advisors adopt a Custom Indexing solution, they will not go backwards to funds because there will be no reason to trade down for less overall functionality. Even for those who have a client that wants to only own the S&P 500 with no modifications in a non-taxable account, a Custom Indexing platform will be able to fulfill that need as well as a simple index firm could, again thanks to increasingly sophisticated technology.

Why Now

So why haven't Custom Indexes and Custom Indexing platforms appeared until now? Because the software required is hard to build and industry conditions—including zero commission trading—are only now evolved enough to make it possible. We built Canvas *on top of* a decade's worth of custom-built internal software. Our inspiration was Amazon Web Services' strategy of offering their internal tools as external services. We've essentially done the same thing with Canvas, but it took us 10 years to build and refine those tools (in the areas of trading, performance, daily model generation and rebalancing, and account management). These systems, with internal names like Workbench and Trade Builder, are the lifeblood of OSAM's separate account business.

Thanks to this pre-existing software infrastructure and our existing team, we were lucky to be the first offering in this new category when we launched Canvas in late 2019. We fully expect more entrants to begin to offer Custom Indexing platforms in the coming years.

Key Points: How Custom Indexing Differs from Direct Indexing

Totally Flexible Investment Allocations Set by You, Not Pre-Packaged Products Set by Them

Custom Indexes are ***actually* customizable**. When building an allocation, investment levers can be pulled according to investor objectives. This can be as simple as weighting into passive for tax-management and cost-control or more complex, such as weighting into any combination of proprietary factors focused on alpha, downside protection, and/or income. Investors can set these levers as well as asset allocation, market cap, and geography inputs to exposure levels ranging from 0% to 100%, then further customize the portfolio for ESG values etc. With a Custom Indexing platform, investors are *not* constrained to a pre-determined, off-the-shelf allocation nor the watered-down factor definitions that have become ubiquitous in Direct Indexing today.

Sample of strategy templates created by advisors using Canvas:

Allocation				Advisor A	Advisor B	Advisor C	Advisor D
Equity	US	US Large Cap	Passive	100.0%	37.5%	28.0%	35.0%
			Factor (Value)		12.5%	2.3%	8.3%
			Factor (Momentum)			2.3%	8.3%
			Factor (Shareholder Yield)			2.3%	8.3%
			Factor (Dividend/Stability)				25.0%
		US SMID	Passive		7.5%	2.3%	
			Factor (Value)		2.5%	3.4%	
			Factor (Momentum)			3.4%	
			Factor (Dividend/Stability)				
		US Micro	Passive				
			Factor (Value)				
			Factor (Momentum)				
	Int'l	Int'l All Cap	Passive		30.0%	21.6%	15.0%
			Factor (Value)		10.0%	7.2%	
			Factor (Momentum)			7.2%	
			Factor (Dividend/Stability)				
	ESG Thematic Strategies (tilt towards/screen out)		Envir./Pollution/Climate Change				Tilt Towards + Screen Out
			Human Rights Violations				Tilt Towards + Screen Out
			Wage & Workplace Equality				Tilt Towards + Screen Out
			Lack of Gun Control Laws				Screen Out Only
			Women Empowerment				Tilt Towards + Screen Out
			Moral/Ethical/Family Decline				Tilt Towards + Screen Out
Fixed Income	Fixed Income		Short Duration/Medium Credit Risk			20.0%	
			Total	**100%**	**100%**	**100%**	**100%**

Intuitive Software Interface Designed for Advisors to Build and Manage Accounts, Not Brochureware

Custom Indexes are built using **advisor-driven software** which seamlessly connects the workflows of advisors, custodians, and the trading team. The user interface should be expertly designed with a paramount focus on ease of use and firm scale. A well-constructed Custom Indexing platform means no more clunky, unconnected processes patched together by email threads, paper, and/or "hidden" Excel files, all which mark the industry today.

A Partnership Model Where Ideas Go from Theoretical to Implementable

We believe a Custom Indexing platform requires listening, building, then delivering to create a more robust toolset and ever-evolving platform for the benefit of all clients. Rather than simply selling, Custom Indexing is about strong **partnership** and creating new opportunities and solutions for advisors and investors.

What We've Learned

Following the advice of Chetan Puttagunta at Benchmark Capital, we decided to recruit a small group of original partners at launch and stick with them, building what they need, for a long period of time after launch. Chetan said this process would take 1 to 3 years, which made me scoff at first. Yet, here we are a year later, having learned a tremendous amount and having built a more complete system. Chetan was right that building a platform like this requires patience and care.

Now that we are managing nearly 500 accounts and are nearing $1B of assets on Canvas, we have learned several key things about Custom Indexing that we didn't know when we started:

1. Customization does matter

70% of our ~500 accounts have totally unique settings. We'd expect that percentage to rise as advisors continue to get comfortable with this new way of managing their clients' money.

2. Taxes are central

Since we first launched, our customers have pushed us to build more nuanced and useful custom-tax features into the platform. Direct Indexing improved simple indexing for taxable investors by generating useful tax losses while sticking close (enough) to the performance of the simple index. What we've learned is that tax losses are important, but so is customization around one's tax strategy.

Investors and their advisors wanted to be able to customize:

- The maximum amount of taxable gains realized while trading their portfolio (in both dollar and percentage terms)
- The tax budget when transitioning from their old portfolio to their new Custom Index
- The tracking error allowed to generate tax losses (sometimes moved higher in years when there are lots of gains to offset, sometimes lower to stick closer to their underlying Custom Index strategy)

Each of these required a large software build to manage but are among the more used features for advisors with their clients (which fits in nicely with the complex tax planning they are often doing for their clients already).

3. Factor exposures are a means, not an end

Our history is one of factor-based investing. We've spent our collective careers defining factors in as much detail as possible, typically seeking the best absolute or risk-adjusted excess return as we build our models.

But Canvas has taught us that often investors are seeking something other than purely returns.

We've learned that risk, income, downside protection, or exposure to innovative companies are also key outcomes that people want to achieve, and they want to use factor-based strategies to achieve those outcomes.

Factors are simply tools to improve the probabilities of certain outcomes that investors care about. Based on investor demand, we have started offering new strategies focused on stability and income. In the future, we expect Canvas will offer a wide range of quantitative factor building blocks that can be arranged to target specific outcomes.

4. ESG is personal

For years, ESG had a lot more bark than bite. It seemed to survive as a topic just as fodder for industry panels and was rarely actually implemented in client portfolios. We can see this shifting as I write. More investors are wanting some sort of consideration of ESG factors in their portfolios, but here again, we've learned that ESG means something unique to most investors. Some investors care exclusively about the elimination of fossil fuels. Others seek to avoid companies which produce unhealthy consumer products. And others want to adjust their portfolio for a whole wide range of issues important to them and their families.

So here again, we find the need for customization. We've encountered many investors unhappy with ETF-based ESG offerings which often do too many things at once for investors. They end up not solving the specific issues that investors want to control for in their portfolios. They also tend to focus on *avoiding* stocks with bad scores, whereas Custom Indexing includes avoiding *and* tilting towards (giving higher portfolio weight to) companies with the best scores.

We don't have a strong view as a firm that these factors will do much to returns in a portfolio. All we know is that the stricter the ESG settings, the higher the tracking error tends to be in the portfolio. But for many, that is a fine and a fair trade-off.

5. Custom Indexes require custom reporting

One of the largest barriers to making Custom Indexing work for advisors is ongoing client reporting. After all, if each investor has their own unique strategy, they'll have their own unique performance (to some degree[1]). Traditionally, most advisors have their investors in the same few strategies, so reporting becomes a one-size fits all exercise. Custom Indexing changes that, and we've spent more time building a new custom reporting engine than on any other project. I suspect in five years, this will all be incredibly sleek, fast, and delivered directly to the end customer via personalized mobile and web applications.

6. The competitive battlefields in Custom Indexing will be quantitative research and software development

The most unique aspect of building a Custom Indexing platform is that it requires *two* R&D teams. First, the quantitative investment research team and second, the software development team. These two groups must work in close connection but do largely independent work. I've said since day one of my tenure running OSAM that the future of our business lies at the intersection of research and technology. Now, I know this is true.

For Custom Indexing to work for advisors, it needs to all live in web-based software that gives advisors a simple, intuitive, user interface. Advisors need to be able to build, track, and report on client Custom Index strategies all in one place. They need to be able to easily create investment templates that address their unique firm philosophy, but then address each of their clients' unique objectives (with scale in mind). This means that Custom Index providers need to be experienced asset management firms that have technology at their core.

Where We Go from Here

Custom Indexing may be inevitable on a 5-10 year timeline, but we all live in the here and now. We focus on problems directly in front of us, not those around the corner. For RIAs, switching to a new foundational platform is a large and time intensive choice. But we believe those who jump the line and adopt a Custom Indexing approach now, will have a significant competitive advantage with clients and prospects. Custom Indexing naturally comes with supporting software tools for reporting and other tasks that used to require manual work. So, these new software platforms will help free up time for advisors to focus on what matters most – meeting new clients and doing more for existing clients.

As for OSAM, we believe in this directional arrow of progress in portfolio management. We will continue to try to "jump the line" in as many areas as we can. Index investing has always been *formulaic*. The formula for the first index fund was: buy all listed stocks, weighted by their float-adjusted market cap. Today, there are thousands of strategies based on quantitative formulas that give investors exposure to themes, factors, or other categories, made available through funds, ETFs, and sometimes separate accounts. But in the future, investors will no longer buy into someone else's formula: each investor will buy into their own.

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[1] While customization does alter performance, we've found most advisors adopt a firm level baseline

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- Accounts managed by OSAM are subject to additions and redemptions of assets under management, which may positively or negatively affect performance depending generally upon the timing of such events in relation to the market's direction.
- Simulated returns may be dependent on the market and economic conditions that existed during the period. Future market or economic conditions can adversely affect the returns.
- **Composite Performance Summary**

For the full composite performance summary of this strategy. please follow this link: http://www.osam.com

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The risk-free rate used in the calculation of Sortino, Sharpe, and Treynor ratios is 5%, consistently applied across time.

The universe of All Stocks consists of all securities in the Chicago Research in Security Prices (CRSP) dataset or S&P Compustat Database (or other, as noted) with inflation-adjusted market capitalization greater than $200 million as of most recent year-end. The universe of Large Stocks consists of all securities in the Chicago Research in Security Prices (CRSP) dataset or S&P Compustat Database (or other, as noted) with inflation-adjusted market capitalization greater than the universe average as of most recent year-end. The stocks are equally weighted and generally rebalanced annually.

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- OSAM may from time to time manage an account by using non-quantitative, subjective investment management methodologies in conjunction with the application of factors.
- The hypothetical backtested performance results assume full investment, whereas an account managed by OSAM may have a positive cash position upon rebalance. Had the hypothetical backtested performance results included a positive cash position, the results would have been different and generally would have been lower.
- The hypothetical backtested performance results for each factor do not reflect any transaction costs of buying and selling securities, investment management fees (including without limitation management fees and performance fees), custody and other costs, or taxes – all of which would be incurred by an investor in any account managed by OSAM. If such costs and fees were reflected, the hypothetical backtested performance results would be lower. Therefore, it should be noted that on the previous pages of this presentation, any back-tested results may be reflected gross of fees. Had OSAM managed the back-tested Portfolio during the corresponding time period, the deduction of an OSAM fee would have decreased the reflected results. For example, the deduction of a 1.00% fee over a 10-year period would have reduced a 10% gross of fees gain to an 8.9% net of fees gain.
- The hypothetical performance does not reflect the reinvestment of dividends and distributions therefrom, interest, capital gains and withholding taxes.
- Accounts managed by OSAM are subject to additions and redemptions of assets under management, which may positively or negatively affect performance depending generally upon the timing of such events in relation to the market’s direction.
- Simulated returns may be dependent on the market and economic conditions that existed during the period. Future market or economic conditions can adversely affect the returns.