

# Blending Algorithms With Empathy – A New Era of Personalized Wealth Management



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## Introduction

Not more than a decade ago, many investors' portfolios looked much like those of their neighbors, with a blend of mutual funds, exchange traded funds (ETFs), and maybe a few blue chip stocks. Today, however, two investors who share the same age, income, and retirement goals might hold entirely different portfolios. One portfolio may be tilted toward ESG (environmental, social, and governance-focused) investments, whereas the other may focus heavily on crypto assets. Despite their differences, both portfolios can be automatically rebalanced to align with each investor's real-time spending habits, personal values, and financial goals. This transformation is the product of a new era in wealth management shaped by hyper-personalization. This paper is written for wealth management professionals and advisors, highlighting both the opportunities these innovations create and the ethical responsibilities firms must uphold to ensure they act in the best interest of clients. We believe this trend will continue and be heavily influenced by artificial intelligence (AI). Financial advisors seem to believe this strongly; according to Accenture's latest North American Wealth Management

Advisor Survey, 96% of 500 financial advisors said generative AI can revolutionize client servicing and investment management.<sup>1</sup>

For decades, traditional investing followed a standardized formula. Investors were often placed into broad risk- or time-based categories, with similar mixes of stocks and bonds allocated to each and with minimal variation and occasional rebalancing. These now commoditized investment solutions promised simplicity but also offered little distinction among providers and limited customization for individuals. However, advances in technology, artificial intelligence, and data processing have made it possible to move beyond one-size-fits-all portfolios and toward something far more dynamic: hyper-personalization.<sup>2</sup> Hyper-personalization in wealth management refers to the use of real-time, dynamic data such as client behaviors, life-stage changes, ESG preferences, transaction patterns, and personality traits. These platforms are built to design, construct, and continuously adapt investment portfolios. This is enabled by large-scale data processing and, increasingly, AI. AI can also provide cues to clients to ensure they remain aligned with their investment plan, which should create better outcomes.

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**“Two investors who share the same age, income, and retirement goals might hold entirely different portfolios.”**

Traditional segmentation grouped investors by static traits like age, income, or risk tolerance, but lacked the nuance to reflect real-life complexity. Direct indexing was a step toward mass customization by letting individuals replicate indexes with more control and tax efficiency.<sup>3</sup> Although a positive advancement, this approach has limitations: most platforms are US equity-only, and the tax benefits from long-only strategies—that is, with investments in only long-term assets—diminish after several years. The reason is that a long-only strategy offers fewer opportunities to “harvest” losses as the portfolio appreciates over time, and previously harvested losses are used up. More recently, several providers such as AQR and Quantinno have introduced long-short strategies that have extended tax loss harvesting windows. Tax loss harvesting will be explained below.

What makes hyper-personalization feasible now is the rise of AI and access to rich, real-time alternative data sources such as credit card transactions, job postings, and social media activity. These data points help track changes in people’s spending patterns, life milestones, and career shifts, allowing portfolios to be continuously updated in line with each investor’s evolving goals and values. This shift from product-centric offerings to person-centric portfolio design ensures that every investment decision is shaped by the investor’s unique profile.<sup>4</sup> At the same time, this rapid evolution raises questions about whether firms will consistently prioritize client interests over their own incentives, highlighting the ongoing importance of fiduciary oversight.

Our research concludes that as traditional investing continues to be commoditized, wealth management is evolving toward scalable AI-powered personalization despite some drawbacks. This shift is enabled by tools such as direct indexing, behavioral nudging, AI-enhanced advisory models, and expanded access to private markets,

all of which help deliver value through individual alignment while still focusing on wealth creation.

## Hyper-Personalized Investing: How AI and Direct Indexing Are Reshaping Portfolio Design

Just as Spotify builds playlists and Netflix curates watchlists, we anticipate that more and more investors will expect their portfolios to be built just for them, reflecting not just time horizons and risk tolerance but also their values, goals, and life preferences. The growing demand for hyper-personalized portfolios reflects investors’ increasing desire for financial strategies that align with their evolving and nuanced life circumstances.<sup>5</sup> Changes in an investor’s ESG values, spending habits, tax position, or financial goals require portfolios that can dynamically adapt. However, building and managing fully personalized portfolios at scale can be challenging for wealth managers, who are often constrained by time, limited data processing capabilities, and a need to maintain client relationships. Today, advances in artificial intelligence (AI), machine learning (ML), and natural language processing (NLP)—described in Exhibit 1—are transforming this challenge into an opportunity.<sup>6</sup>

By leveraging real-time data and AI, wealth management firms are now better equipped to design, construct, and implement portfolios that reflect each investor’s unique preferences and priorities. This technological evolution not only constructs portfolios to match client needs and preferences but also enhances the client experience, enabling advisors to focus more on strategic conversations and relationship-building while technology handles the complexity of portfolio personalization.

One investment strategy advancing the trend of personalized portfolio design is direct indexing. Unlike traditional investment vehicles such as mutual funds or ETFs, which bundle securities to track a market index, direct indexing allows investors to own the individual securities that make up an index and/or subset of securities, offering more customization. This customization can reflect not only investors’ financial goals

## Exhibit 1. The Impact of AI, ML, and NLP on Wealth Management Personalization

Technology	Definition	Implications
Artificial Intelligence (AI)	Enables machines to learn from data, solve problems, and execute tasks. Is programmed to simulate human intelligence.	Enables real-time portfolio adjustments tailored to client goals and tax circumstances, automating portfolio management and risk assessment.
Machine Learning (ML)	A subset of AI that uses algorithms and statistical models to enable computers to improve tasks.	Analyzes large datasets to identify market trends and investment opportunities.
Natural Language Processing (NLP)	A subset of AI that helps technology to understand and generate human language.	Extracts client preferences from conversations and uses that information to customize portfolios; enhances efficiency in completing tasks like reporting and onboarding.

but also their personal values, such as ESG considerations or sector-specific exposure preferences. Direct indexing also allows for the implementation of tax efficiency strategies and creates room for advisors to spend more time building client relationships and less time behind index mechanics.<sup>7</sup> While high minimums and transaction costs remain barriers for broader adoption, technological advancements make direct indexing an increasingly transformative tool for personalized wealth management. According to Morgan Stanley, technological advancements are increasing the accessibility of direct indexing through its ability to reduce investment minimums, to the point where, as of May 2025, “[d]irect indexing assets under management have grown at a 12.7% compound annual growth rate in five years.”<sup>8</sup>

By enabling investors to exclude or overweight specific stocks selectively, direct indexing opens

the door to hyper-personalized portfolios that align more precisely with individual beliefs, risk tolerances, and unique circumstances affecting portfolio exposure. Furthermore, direct indexing allows for diversification since it can expand a highly concentrated portfolio overweight in one sector to implement index-tracking strategies that limit additional exposures to that specific sector.<sup>9</sup> This degree of personalization is particularly compelling in today’s market environment, where investors increasingly expect tailored financial solutions that reflect their unique life circumstances and priorities.

Direct indexing is often implemented through separately managed accounts (SMAs), which provide the infrastructure for individualized holdings. SMAs are professionally managed portfolios that allow clients to invest in individual stocks and bonds, offering personalized

investment strategies aligned with a client’s beliefs, tax circumstances, and goals. Moreover, direct indexing enhances tax efficiency through tax-loss harvesting strategies,<sup>10</sup> which call for selling individual securities that have declined in value to realize a loss. These realized losses can then be used to offset capital gains from other investments. Direct indexing provides the opportunity for continuous tax management that directly aligns with client-specific tax circumstances, enabling investors to realize larger after-tax alpha. After-tax alpha is the profit gained from an investment after that capital gain is taxed. Enhanced tax management provides investors the opportunity to receive higher profits on taxable capital gains. Compared to traditional investment vehicles like mutual funds, which often distribute capital gains to all shareholders and thus create taxable events regardless of individual performance, direct indexing offers a more tax-efficient alternative, as Exhibit 2 shows.

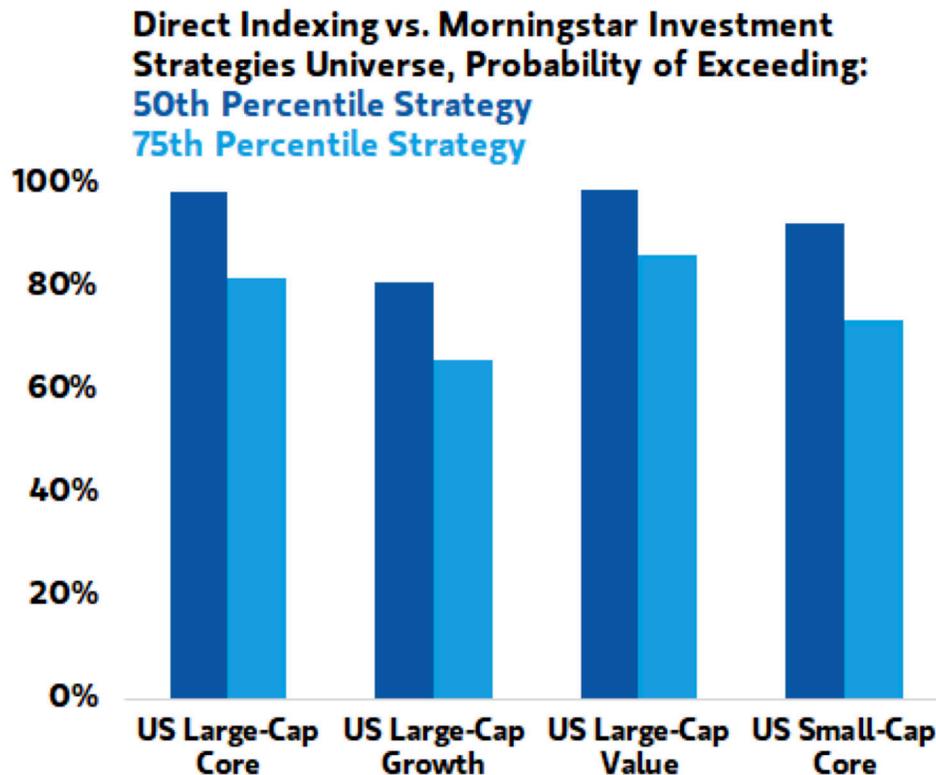
derived from direct indexing (dark blue) in comparison to general investment strategies track by Morningstar (light blue).<sup>11</sup>

Direct indexing’s relative tax efficiency is largely due to its ability to take advantage of tax-loss harvesting. Given that direct indexing allows investors to own individual securities, it allows advisors to target specific tax loss opportunities—something that mutual funds and ETFs cannot offer. This characteristic allows investors to realize a larger after-tax alpha. Since investors, ranging from everyday investors to ultra-high-net-worth investors, are attentive to tax considerations, a recent Broadridge survey found that “85% of those currently offering or planning to offer direct indexing also saw ‘moderate to high replacement of ETFs.’”<sup>12</sup> Direct indexing is not only a vehicle for greater personalization but also a tool for managing taxes more efficiently over time.<sup>13</sup>

Advanced algorithms and AI can now automate rebalancing and tax-loss harvesting, continuously

Continuous outperformance of post-tax returns

## Exhibit 2: Direct Indexing Strategies Achieved Favorable Historical Post-Tax Returns versus the Morningstar Investment Strategies Universe



Source: Morgan Stanley Wealth Management GIO

monitoring portfolios to identify tax-loss harvesting opportunities while adhering to the IRS wash sale rule, which prohibits selling off an asset at a loss but then buying it back in quick order as a way to claim a tax loss while still maintaining one's position in the market. Traditional tax-loss harvesting methods are manual and require continuous identification of loss opportunities, constant research on rebalancing potential, and other time-consuming deep research that limits scalability.

By implementing tax-loss harvesting technology such as Aperio, Parametric, or 55ip, advisors have more time to focus on client relationships and maximize tax efficiency,<sup>14</sup> a benefit that positions direct indexing as both tax-efficient and performance-enhancing. Exhibit 3 differentiates these three tax-loss harvesting technologies.

However, despite its advantages, direct indexing has traditionally been associated with high minimum investment thresholds and elevated transaction costs due to the frequency of trades

needed to maintain tax efficiency and of portfolio rebalancing, both of which erode investment returns. The minimum investment is typically \$250,000. However, with the growing demand for the democratization of investing,<sup>15</sup> minimums are decreasing, increasing the affordability of direct indexing. Another important limitation involves the international implications on expected tracking errors. Specifically, direct indexing for international equity indexes tends to result in higher rate of tracking errors than in US equity indexes. This means that the returns on a portfolio using direct indexing may diverge more significantly from its international benchmark. One key reason is the reliance on American depository receipts (ADRs) to represent international equities in U.S. portfolios. For example, China's efforts to reduce the number of its ADRs led to regulatory changes affecting ADR listings in July 2021. As countries impose restrictions or modify ADR availability, investors may face constraints on achieving their desired exposure to international markets through direct indexing. These constraints can

### Exhibit 3: Services Offered by Tax-Loss Harvesting Technology

Firm	Service	Clientele
BlackRock	Aperio: specializes in curating customized direct indexing solutions	<ol style="list-style-type: none"> <li>1. Wealth management firms</li> <li>2. High-net-worth individuals</li> <li>3. Ultra-high-net-worth individuals</li> <li>4. Institutional investors</li> <li>5. Registered Investment Advisors</li> </ol>
Parametric Portfolio Associates	Parametric: provides direct indexing strategies, tax-managed portfolios, and separately managed accounts through portfolio construction expertise to deliver hyper-personalized portfolios	<ol style="list-style-type: none"> <li>1. Institutional investors</li> <li>2. Wealth management firms</li> <li>3. Financial advisors</li> <li>4. Registered Investment Advisors</li> </ol>
55ip	ActiveTax Technology: automated tax optimization platform focused on automated tax-loss harvesting, tax-aware rebalancing, and personalized tax management	<ol style="list-style-type: none"> <li>1. Financial advisors</li> <li>2. Registered Investment Advisors</li> <li>3. Wealth management firms</li> <li>4. Broker-dealers</li> <li>5. Asset managers</li> <li>6. Custodians</li> <li>7. Independent financial advisors</li> </ol>

increase tracking errors and limit the effectiveness of international diversification strategies.<sup>16</sup>

**“By combining structural customization with dynamic tax optimization and automated rebalancing, direct indexing provides additional options to wealth managers to deliver portfolios that are not only efficient and responsive but deeply reflective of each investor’s unique financial journey.”**

As investor expectations shift toward personalized and value-aligned financial strategies, direct indexing stands at the forefront of this transformation. With the support of AI, machine learning, and real-time data, direct indexing is becoming more accessible, scalable, and client-focused. By combining structural customization with dynamic tax optimization and automated rebalancing, direct indexing provides additional options to wealth managers, allowing them to deliver efficient and responsive portfolios that deeply reflect each investor’s unique Financial Journey. Although cost and accessibility challenges remain, the integration of advanced technology is steadily breaking down these barriers.

## Empowering Advisors: AI Enhances, But Does Not Replace, Human Advisors

Although AI increasingly powers the mechanics of portfolio personalization, it is the evolving role of the human advisor, augmented by intelligent systems, that determines how effectively that personalization is delivered and trusted. In modern wealth management, while machines process data, only people can translate it into meaningful

financial insight. For example, Envestnet’s Decision Intelligence platform analyzes clients’ account histories, life events, and transactional patterns to surface tailored “next best action” prompts such as rebalancing for a client nearing the need to pay for college or reallocating cash due to increased healthcare spending.<sup>17</sup> Advisors then interpret these insights to craft personalized recommendations that reflect each client’s evolving needs and context. The most effective advisory models don’t seek to replace human judgment with AI, but rather to enhance it through collaboration. This integration represents not just a technological upgrade, but also a philosophical shift. Personalization is no longer a premium service; it is evolving into the new baseline. Delivering it at scale requires a model that centers on both algorithmic insight and human understanding. Firms are not the only drivers of this shift; research demonstrates that investors themselves welcome it. A report by the London Stock Exchange Group found that even though only 29% currently use AI for financial advice, over 80% of investors are open to AI-assisted portfolio management.<sup>18</sup> The appetite exists—not for robo-advisors to take over, but for human advisors to be aided by intelligent tools that deepen trust and deliver smarter outcomes.

Traditionally, financial advisors relied on simplified tools, such as single risk-tolerance scores or age-based models to guide portfolio recommendations. Yet this standardized approach is increasingly seen as inadequate. As the CFA Institute notes, “a single score derived from a risk-tolerance questionnaire or revealed preference test, while useful... is not sufficient to describe an investor’s risk need, risk-taking ability, or behavioral loss tolerance.”<sup>19</sup> Today, the advisor’s role is shifting. Advisors are becoming strategic orchestrators who interpret AI-driven insights to create deeply personalized strategies. The 2024 EY Global Wealth Management Report echoes this finding: “As clients gain access to increasingly sophisticated investment management tools, relationship management will need to move beyond transaction support and formulaic advice—differentiating firms through a truly client-centric value proposition that delivers holistic, personalized experiences.”<sup>20</sup> In this model, the advisor uses AI-generated signals not as directives, but as catalysts for richer, human-led conversations about a client’s goals, life changes, and values. A retirement

projection based on dynamic transaction data, for example, is no longer the end; it's the starting point of an ongoing dialogue rooted in individual nuance.

AI thrives at scale. It can analyze massive datasets, automate routine tasks, and generate recommendations in seconds. One notable example is Morgan Stanley's ChatGPT-4-powered assistant, known as "Debrief," a proprietary AI platform designed to support financial advisors by accessing over 70,000 research reports and summarizing key client meeting insights. This tool is transforming advisory workflow, freeing advisors to focus on deeper, more personalized client conversations. As Victoria Bailey, a Morgan Stanley advisor, puts it, "Because of AI @ Morgan Stanley Debrief, I can have deeper, more personal conversations with my clients. I don't have to rely on my team to jot down notes and action items anymore. It summarizes discussion topics and outlines the next steps, which makes our meetings so much more productive."<sup>21</sup> Her experience underscores a broader shift: these tools are not replacing advisors; they're empowering them. The human elements of judgment, empathy, and trust remain irreplaceable. And as AI tools evolve, firms that adopt them strategically will lead the next wave of innovation, whereas those that lag behind risk obsolescence. Trust in AI will grow, but human relationships will continue to anchor the advisory experience.

AI excels at tasks like identifying tax opportunities, scanning markets, and generating draft communications, but it cannot resolve ambiguity or detect emotional subtext. When an AI flags a portfolio as misaligned due to ESG preferences, for example, only the advisor can discern whether that signal reflects an error, a shifting priority, or a moment of client uncertainty. Without this human layer, AI insights risk being misapplied or misunderstood. This challenge echoes findings in adjacent domains such as, for example, financial crime detection, McKinsey reports that up to 90% of machine-generated alerts are false positives, underscoring the indispensable role of human discernment in refining algorithmic outputs.<sup>22</sup> This is especially relevant now, as AI models improve rapidly but still depend on the quality of the data and the framing of the questions they are asked.

No matter how advanced AI becomes, trust is not a programmable feature, a tension that the World Economic Forum captured in a March 2025 report: "The essential question is can AI systems deliver the level of emotional intelligence and empathy required by investors to share information and needs in ways they do with their human advisors, i.e., *could machines ever replace human advisors?*"<sup>23</sup> The answer may be "eventually," but right now the answer is clear: not yet. In the current era, AI is best used as a partner, not as a replacement.

This evolving partnership is also reshaping the financial workforce. As AI becomes embedded across advisory workflows, firms are beginning to define entirely new roles such as prompt engineers, unstructured data specialists, and AI ethics stewards as well.<sup>24</sup> These positions signal a broader shift: the need for professionals who can translate complex algorithms into practical, ethical, and client-centered solutions. It's not just about understanding the technology, it's also about ensuring that it serves human goals with clarity and care.

At the same time, some traditional roles are being automated. Junior analysts, data entry clerks, and reporting assistants, whose jobs have long involved repetitive modeling and templated outputs, are at higher risk of displacement. Firms like Morgan Stanley and JPMorgan are already restructuring analyst workflows using AI. In his 2023 shareholder letter, JPMorgan CEO Jamie Dimon noted, "Over time, we anticipate that our use of AI has the potential to augment virtually every job, as well as impact our workforce composition."<sup>25</sup> More recently, Dimon explained JPMorgan's \$18 billion investment in AI, saying, "There will be no job, no process, no function that won't be affected by AI—mostly for the positive. It's about getting all the people who run these businesses to understand the power of it."<sup>26</sup>

Still, AI is not a story of mass replacement, but one of strategic realignment. When used responsibly, AI expands, not erases, the role of the human advisor. It eliminates manual overhead, speeds up research, and helps identify patterns no human could see. However, the advisor's

value is not just in seeing, but also in knowing what to do with what they see, and that requires judgment, empathy, and presence, at which AI is no expert yet.

**“AI may be the engine, but humans are still in the driver’s seat.”**

The new advisory model driven by humans and AI embodies the shift at the heart of our paper: away from mass-produced financial products and toward personalized strategies enabled by technology and shaped by human insight. AI may be the engine, but humans are still in the driver’s seat. The near-term future belongs not to machines alone, but also to advisors who know how to think with them. Yet, as advisory models integrate AI more deeply into client relationships, new ethical questions emerge, especially when algorithms begin shaping investor behavior in subtle, persistent ways.

## Customizing Investor Guidance Through Financial Nudges

Digital notifications have served as reminders to act or as simple messages from a friend. The beginnings of nudging can best be seen through Apple’s Health app or any app that tracks physical activity. Although users always have the option to turn notifications off, financial app nudges remind users of their set goals. Like customized notifications on your phone, AI nudges based on your finances are tailored to your preferences, using insights from your advisor based on your portfolio, risk tolerance, sentiment toward the market, and more.

With the release of the Apple Watch in 2015, the health app improved further, enabling more time-sensitive notifications. For example, after a user walks for a certain period, the app might ask if they want to track an outdoor walk. Having the option to turn off certain notifications gives users the ability to customize and personalize their experience with an app. This customization allows for reasonable choices, rather than the purely

rational idea of enabling every notification—even if they’re not always useful.

Morgan Housel’s *The Psychology of Money* (2020) explores the idea of being reasonable rather than purely rational. Housel suggests that when managing money, we should be reasonable rather than rational since being reasonable is more realistic and sustainable. Despite the goal being to generate wealth, maximizing returns won’t necessarily give you a plan that fits you, making being reasonable the upper hand on the long run. To determine what is reasonable for us, we must rely on the financial and emotional patterns we exhibit during economic challenges. One way to support this is through personalized guidance, since what helps one investor may not benefit another. To make this process more efficient and to reduce stress on advisors, emotional distress during financial hardship can be addressed much like how a fitness app nudges users—for example, by reminding them that they’re just 100 calories away from their daily goal—or, in the case of a financial app, \$100 away from a \$5,000 milestone.

Volatile investments like stocks can change at any moment. At times, investors may react in ways that affect their ability to profit—for example, selling during a temporary price decline. However, a nudge reminding the investor of their goals or advising them not to sell can provide a moment of reflection before they act. Apps track investors’ behavior based on how they interact with the platform. With the help of sentiment analysis—measured by tone of the messages sent by the user (analyzing key words associated with a strong emotion), response rate, and overall engagement with the AI model—AI can link investor behavior during market volatility with sentiment and deliver personalized messages encouraging them to hold or exit positions.

Praveen Kumar Reddy Bandi reported that investors who received AI-customized messages demonstrated “higher overall satisfaction, greater trust in their advisor’s recommendations, and substantially increased likelihood to expand their relationship with the firm.”<sup>27</sup> AI can also recognize investors’ milestones and act as a support system. One way it does this is by focusing on the quality rather than the quantity

of nudges. Improving the quality of nudges has been shown to increase the likelihood of acting on recommendations by 42%, according to Praveen.

Firms implement AI differently depending on their client base. Each company has its own strategy tailored to its customers. Many major companies in the wealth and investment management industry have introduced AI to their platforms, with each approach aligned to different company goals. Still, the main objective of AI remains: to enhance customer interactions while maintaining financial security.

Exhibit 4 describes various technologies companies have made available to financial advisors and investors. As noted above, Morgan Stanley developed an AI assistant for advisors in the wake of its early access to OpenAI’s GPT-4 in March 2023, the version discussed on this section serves a more technical purpose as the one mentioned previously. As a research tool, the assistant answers administrative questions, such as “How do I open an IRA for a client?” It can even assist advisors with broader life planning topics, like helping a client prepare for marriage.<sup>28</sup> Morningstar, meanwhile, launched “Mo,” another AI assistant, built with Microsoft’s

Azure OpenAI. Like Morgan Stanley’s assistant, Mo supports advisor research and enhances recommendations.<sup>29</sup> WalkingTree, a fintech company, developed AlphaTree, an AI-powered stock analysis and market intelligence platform for investors. AlphaTree conducts its own research to keep investors updated on their holdings. It also provides access to smart portfolios, AI-driven insights, and live alerts based on market sentiment and critical news.<sup>30</sup> And UBS, a global wealth management firm, partnered with Microsoft to create “UBS Red,” an AI copilot that helps human advisors by providing personalized insights and data—saving time so advisors can focus on more complex clients and portfolios.<sup>31</sup>

As more fintech companies—such as Chime, Betterment, and Digit—adopt AI, important considerations arise, particularly regarding ethical usage and prioritizing customers’ best interests. One major concern is the development of strong governance frameworks to protect client interests and ensure compliance with regulations. Nearly 62% of firms cite regulatory challenges as a key concern regarding AI.<sup>32</sup> The most effective approach includes ethical frameworks, regulatory oversight, and transparency about how investor data is processed and whom it is shared with.

## Exhibit 4. Partnerships Between Financial Firms and AI Platforms

Firm	Partner AI	Purpose of Tool	Users
Morgan Stanley	AI @ Morgan Stanley Assistant (OpenAI’s GPT-4)	Research tool; supports life planning; automation of repetitive tasks → complex clients get more time with advisor	Financial advisors
Morningstar	Mo (Microsoft Azure OpenAI)	Advisor research support; enhances recommendations; investment comparisons → Better advice for clients, and more options for advisors	Financial advisors and investors
WalkingTree	AlphaTree	AI stock analysis and market intelligence; risk tolerance insights; alerts on market sentiment → informs clients and of important factors that drive decision-making	Investors
UBS	UBS Red (Microsoft)	Personalized insights; research enhancement; multilingual support → expanded access to different households	Financial advisors

Another challenge is notification fatigue. Too many nudges may cause investors to ignore them entirely.<sup>33</sup> As noted earlier, personalization in AI nudging should focus on message quality, not quantity. Allowing users to opt out of nudges empowers them to stay engaged only if they find them helpful. Accepting AI nudges should be a choice, not an obligation. Overreliance on AI can also diminish the human aspect of investing and the purpose of personalization if there's no human for whom to customize. That said, 63% of firms see AI as an enhancement to client engagement—not a replacement for traditional advisor-investor interactions.

**“AI Nudges should be a consideration of choice, not an obligation”**

In conclusion, an AI nudge should be transparent, user-centered, and easy to opt out of when necessary. As AI and new technologies continue to evolve in wealth management, firms can build trust through ethical usage and transparency.

## Private Markets Access: The Future of Alternative Investments in a Hyper-Personalized Era

Although AI-driven influence reshapes personalization, another powerful force does the same from a different angle: expanded access to private markets, giving investors more ways to align their portfolios with personal goals and values. Over \$14 trillion now sits in global private markets, yet until recently access to these assets was limited to a select few such as wealthy individuals and large institutions like pension funds and investment firms.<sup>34</sup> AI and the practice of tokenization—the process of converting ownership rights in an asset into digital tokens on a blockchain—have the potential to alter the foundations of capital formation, investor access, and asset allocation in ways that open private markets to a broader range of investors than ever before. Hyper-personalization has emerged as a defining characteristic of this shift, not just in personalizing investor experiences

but also in redesigning platforms, structures, and workflows to serve a diverse range of users and regulatory environments. Leading platforms like, Yieldstreet, iCapital, and Securitize are at the forefront of driving this transformation across global private markets.

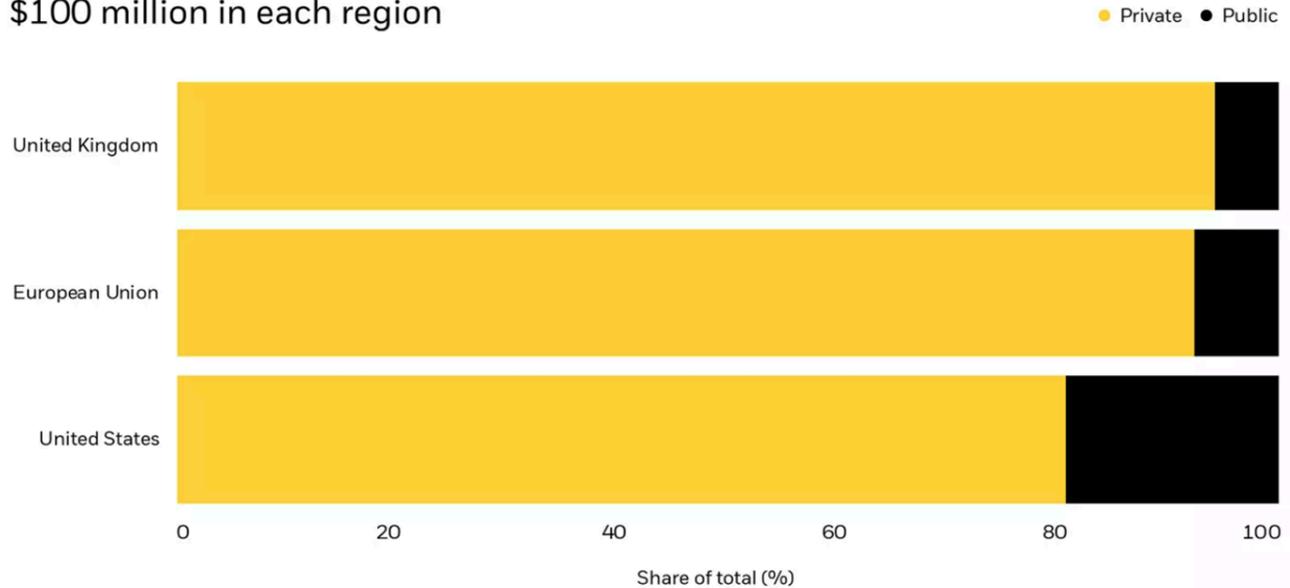
The growing relevance of private markets is closely tied to the fact that most companies valued at over \$100 million are no longer going public. However, this is just one part of a larger shift. Other drivers include the expanding roles of private infrastructure, real estate, private credit, and hedge funds, which offer investors access to alternative sources of return and diversification outside traditional public markets. In recent years, an increasing share of high-growth, high-value companies have opted to remain private, delaying or entirely avoiding IPOs. This trend reflects both the abundance of private capital and the regulatory and scrutiny burdens of public markets. As a result, a shrinking percentage of companies are listed publicly, which limits investor access to some of the economy's most dynamic opportunities. For long-term investors—especially those focused on retirement—this shift means that traditional public market portfolios no longer capture the full picture of corporate growth, as many major companies like SpaceX and OpenAI have delayed or avoided going public. Private markets are increasingly gaining traction for diversification and return potential, particularly since they increasingly house the types of companies that once fueled public equity performance. Exhibit 5 demonstrates the current state of this trend in the United States, the European Union, and the United Kingdom as of 2025.

Historically, private markets were reserved for institutional investors and ultra-high-net-worth individuals due to high capital thresholds, long lock-up periods, and complex regulatory structures. These markets, spanning private equity, private credit, infrastructure, real estate, and venture capital, offer access to differentiated return sources and portfolio diversification. However, the traditional frameworks for accessing these assets were designed for a small, homogenous audience and have not scaled with the broader democratization of investing. What makes private markets relevant now

## Exhibit 5. Private vs. Public Companies in the U.S., E.U., and U.K.

### Most companies in the U.S., EU, and U.K. are private

Distribution of public vs. private companies with revenue greater than or equal to \$100 million in each region



Comparison of the distribution of private (yellow) and public (black) companies in the United Kingdom, the European Union, and the United States.<sup>35</sup>

is the convergence of structural needs and technological capability. On one hand, the limitations of public markets, including compressed yields and increased volatility, have made private market exposures more attractive across a range of portfolios. On the other hand, emerging technologies have reduced operational friction, lowered participation thresholds, and introduced new modalities for access. Tokenization is positioned to unlock fractional ownership and enhanced liquidity, while AI systems bring scale and personalization to functions that previously depended on human intermediation.

This shift means that harnessing the value of private markets is no longer limited to institutions and the ultra-wealthy. Instead, new digital infrastructures are reshaping private markets into scalable systems capable of accommodating more nuanced user profiles. Investors with

different goals and constraints can now access private market opportunities based on their individual profiles. The expansion of access to alternative investments is being driven by several interconnected developments that together are reshaping private markets into more inclusive, more liquid, personalized ecosystems. Wealth platforms and fintech interfaces that package alternative assets into accessible, user-friendly investment products are gaining popularity. Companies like Fundrise, Yieldstreet, Moonfare, and iCapital have built platforms that democratize access to private credit, real estate, and private equity by lowering capital requirements and simplifying the investment process. Many of these platforms now incorporate robo-advisory tools that construct alternative investment portfolios tailored to individual client profiles, helping to align investments with personal financial goals and risk appetites. For example, Yieldstreet offers an automated tool that recommends a mix of

asset-backed investments—such as private credit and real estate—based on investors’ income needs, time horizons, and risk profiles. Additionally, application programming interfaces (APIs) enable registered investment advisers (RIAs) and digital wealth managers to seamlessly integrate these alternatives into clients’ broader portfolios, promoting a more holistic and customizable approach to wealth management. Exhibit 6 shows some of these platforms.

Evergreen funds also play a central role in the technology-driven evolution of private markets. These structures are designed for continuous capital raising and periodic liquidity, supported by modern fund administration systems, digital onboarding platforms, and automated compliance tools. One example is Blackstone’s Private Equity Strategies Fund (BXPE), which provides access to a diversified portfolio of private equity investments with lower investment

## Exhibit 6. Digital Platforms Expanding Investor Access to Private Markets

Name of Company	Goal	Methods of Implementation
Yieldstreet	Democratize access to diverse alternative investments such as private credit and real estate	<ul style="list-style-type: none"> <li>• Offers an automated investment tool that recommends asset-backed investments tailored to income needs, time horizon, and risk profile</li> <li>• Packages investments into accessible products for retail investors</li> </ul>
Moonfare	Provide private equity access to individual investors	<ul style="list-style-type: none"> <li>• Delivers a digital platform that simplifies the investment process</li> <li>• Reduces traditional capital barriers, allowing individuals to invest in private equity with smaller commitments</li> </ul>
iCapital	Enable financial advisors and high-net-worth investors to access a broad range of alternative investments	<ul style="list-style-type: none"> <li>• Offers a technology platform that connects advisors to private equity, credit, and hedge fund opportunities</li> <li>• Uses APIs to help integrate alternatives into broader portfolio strategies</li> </ul>
Fundrise	Make real estate and other private market investments accessible to retail investors	<ul style="list-style-type: none"> <li>• Provides a platform offering eREITs and other private real estate products with low minimum investments. Uses proprietary software to manage portfolios and enhance transparency.</li> </ul>

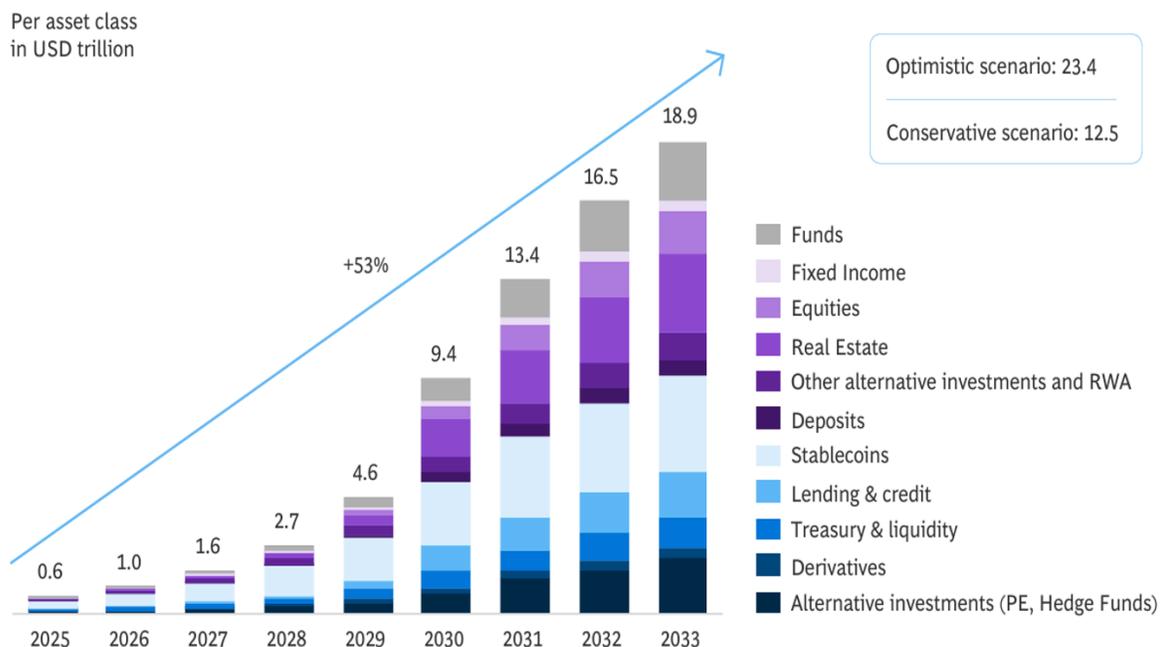
minimums, quarterly liquidity (subject to gating — temporary limits on withdrawals during periods of market stress or high redemption requests), and streamlined digital reporting. Delivered through wealth management platforms, BXPE uses technology to simplify access and improve the investor experience. As funds like BXPE gain traction, they help make private markets more inclusive, flexible, and accessible to a broader range of investors.

One of the biggest transformations in private markets is the tokenization of real assets, which uses blockchain technology to enable investors to own fractions of traditionally illiquid holdings. Through tokenization, each digital token represents a share of an underlying asset, whether it is an office building, a private equity fund, or even a work of fine art like a Picasso painting. These tokens can be traded on emerging secondary markets, significantly enhancing liquidity options for investors who were previously locked into long holding periods. Smart contracts

embedded within the tokens automate key functions such as dividend distributions, voting rights, and compliance verification, adding efficiency and transparency to asset management.

The asset tokenization market is growing rapidly. According to research from Boston Consulting Group (BCG), the market of tokenized illiquid assets could reach \$18.9 trillion by 2033, representing 10% of global GDP. Each token class carries its own rights and liquidity profile, enabling more precise segmentation and tailored risk allocation. This innovation is clearly no longer hypothetical. Platforms like Securitize and RealT have already successfully issued tokenized real estate and asset-backed tokens, allowing for fractional ownership with enhanced liquidity and lower capital thresholds. For instance, Securitize manages over \$4 billion in tokenized assets on-chain, including large institutional products like BlackRock’s BUIDL treasury fund and Apollo’s credit fund token ACRED.

### Exhibit 7: Projected Growth of Tokenized Real-World Assets by 2033<sup>36</sup>



This figure shows projected market size of tokenized real-world assets (RWAs) in US\$ trillions by 2033, under three scenarios: Each bar (or area) represents the forecasted contribution of different asset classes (e.g., fixed income, real estate, alternatives)

Exhibit 7 presents projected growth in tokenized real-world assets, breaking out conservative and optimistic forecast scenarios. It shows how different asset types (e.g. fixed income, real estate, alternative investments) are expected to contribute to overall totals by 2033. The baseline forecast is \$18.9 trillion, bracketed by \$12 trillion in the conservative case and \$23.4 trillion in the optimistic case.

Platforms like JPMorgan's Kinexys, a blockchain-based digital assets platform designed to tokenize and facilitate settlement of real-world assets, and Goldman Sachs' GS DAP, a private blockchain platform enabling issuance, settlement, and lifecycle management of tokenized assets, have already enabled issuance of tokenized assets in real estate and private equity markets, supporting multitiered access models where investors across geographies and capital levels can engage with the same underlying asset through differentiated token classes. Each token class carries its own rights and liquidity profile, enabling more precise segmentation and tailored risk allocation. JPMorgan's blockchain infrastructure, anchored by Kinexys, has processed over \$1.5 trillion in transactions since 2020, including intraday repos and cross-border payments, and now averages more than \$2 billion daily for clients such as Siemens, BlackRock, and Ant International.<sup>37</sup>

Another important development is the gradual emergence of secondary market liquidity for private market investments. Traditionally, investors had to commit capital for extended periods, often seven to ten years, with no ability to exit early. However, platforms such as Securitize, tZERO, and INX are pioneering compliant secondary trading venues where tokenized private assets can be bought and sold before fund maturity. Although these markets remain nascent and liquidity is still relatively thin, their growth is steadily providing investors with greater flexibility and control over their private market allocations, helping to mitigate one of the biggest barriers to broader participation. Exhibit 8 below highlights several platforms leading the development of secondary markets and tokenized asset infrastructure in private markets.

Crucially, the integration of AI in investment sourcing and matching enhances the ability to scale and personalize private market access.

AI-driven platforms analyze vast and diverse datasets to identify attractive deal opportunities and dynamically match them to investor preferences based on factors such as cash flow projections, tax considerations, ESG goals, and risk profiles. For example, Delphia, a data-driven investment platform, uses machine learning to analyze both public and proprietary data, including user-contributed financial behaviors, to source private market opportunities and tailor allocations based on individual risk tolerance and investment objectives. This kind of AI-enabled personalization is helping to open alternative assets to a broader investor base while improving fit and efficiency.

Together, tokenization, wealth platforms, secondary market liquidity, and AI integration are fundamentally transforming the private markets landscape. These innovations reduce operational frictions, expand access, and enable hyper-personalization, creating an ecosystem where diverse needs and preferences can be met with greater efficiency and transparency than ever before.

Although the transformation of private markets offers significant promise, it also introduces systemic risks. Tokenization reduces barriers to entry but also decentralizes responsibility. In a fully tokenized framework, who is accountable when liquidity disappears, or smart contracts fail? Platform risk becomes particularly salient when access depends on a centralized fintech operator. Tokenization currently poses little risk to the stability of the overall financial system, given its limited scale and relatively narrow adoption. However, as adoption increases, the Financial Stability Board (FSB) highlights several potential risks. These include mismatches in liquidity and maturity, excessive use of leverage through rehypothecation, lack of transparency in asset pricing and quality due to smart contract composability, systemic risks from market concentration, and operational vulnerabilities caused by the involvement of multiple parties.<sup>38</sup>

AI systems used in deal sourcing and personalization introduce another category of risk. Algorithms trained on biased datasets or narrow geographies can reinforce exclusion rather than broaden access. If the training data underrepresents certain sectors, platforms may unintentionally perpetuate capital gaps.

## Exhibit 8. Platforms Powering Tokenization and Secondary Market Liquidity in Private Markets

Name of Company	Goal	Method of Implementation
Securitize	Bring liquidity to private market investments through compliant tokenized trading	<ul style="list-style-type: none"> <li>Operates a platform for issuing and trading tokenized private assets.</li> <li>Allows investors to buy and sell private market holdings on a regulated secondary market.</li> </ul>
tZero	Create a regulated marketplace for trading digital securities	<ul style="list-style-type: none"> <li>Runs an SEC-regulated alternative trading system (ATS) for digital assets.</li> <li>Enables early exits from private investments by offering secondary trading opportunities.</li> </ul>
INX	Provide a secure and regulated platform for trading tokenized assets	<ul style="list-style-type: none"> <li>Offers a trading platform for digital securities and tokenized private investments.</li> <li>Focuses on compliance and investor protection while enabling secondary liquidity.</li> </ul>
Kinexys (JPMorgan)	Blockchain infrastructure for tokenized real-world assets	<ul style="list-style-type: none"> <li>Supports issuance, settlement, and multi-tiered access to tokenized assets.</li> <li>Processes \$2B+ daily for institutions like Siemens and BlackRock.</li> </ul>
GS DAP (Goldman Sachs)	Private blockchain platform for tokenized asset management	<ul style="list-style-type: none"> <li>Enables issuance, settlement, and lifecycle tracking of tokenized private equity and real estate assets.</li> </ul>

Ensuring that datasets are diverse and regularly audited is essential to long-term equity and inclusion. As AI technology rapidly advances, private credit managers should express both excitement about its potential and concerns over risks like data quality and unintended biases. Industry leaders, including JPMorgan Chase, stress that the effectiveness and fairness of AI depend heavily on the integrity and inclusivity of the data used to train these systems and hence they have invested in eliminating algorithmic biases.<sup>39</sup>

**“The future standard portfolio may look more like 50/30/20—stocks, bonds, and private assets like real estate, infrastructure, and private credit.”**

**Larry Fink, BlackRock**

Regulatory frameworks have started to evolve but remain uneven. The Securities and Exchange Commission (SEC) and the European Securities and Markets Authority (ESMA) have issued preliminary guidance on the custody, trading, and taxation of digital assets, but comprehensive frameworks are still under construction. A pressing need exists for global coordination to classify assets, protect investors, and develop cross-border compliance mechanisms. Without such standards, platforms may find themselves operating in legal gray zones. There is also the question of digital identity and data security. Hyper-personalization requires the use of granular investor data, from biometric identifiers to behavioral analytics. Without clear guardrails, the use of this data could lead to privacy violations or discriminatory practices. Privacy-preserving technologies and robust data governance will be critical to mitigating these risks.

Despite these concerns, the direction of travel is clear. As Larry Fink of BlackRock observed in his 2025 letter to shareholders, “The future standard portfolio may look more like 50/30/20—stocks, bonds, and private assets like real estate, infrastructure, and private credit.” The tools to deliver that vision are advancing rapidly.

This shift will require greater hyper-personalization,

using detailed investor data to tailor portfolios that fit individual preferences and risk tolerances. Advanced technologies will enable more personalized asset allocation, making the future of investing more adaptive and precise. What matters now is ensuring that access, customization, and innovation are balanced by accountability, interoperability, and inclusion.

## Conclusion

Commoditization of traditional investing has pushed wealth management into a new phase defined by scalable, AI-powered customization. The shift to hyper-personalization, while not without drawbacks, is a positive development, helping investors to reimagine how financial services can better meet their unique needs. It reflects a move away from one-size-fits-all products toward individualized portfolio design that aligns with clients’ goals, values, and evolving life circumstances. Yet these same tools, if misused, risk prioritizing firm profits over client well-being, making fiduciary responsibility and client-first practices central to this industry transition.

Direct indexing is an investment strategy that offers investors access to hyper-personalized and customized portfolio construction, one that presents tailored solutions to evolving life circumstances. Composing an investment portfolio of individual stocks and bonds allows for greater customization of sector exposure, alignment with personal beliefs and ESG preferences, and catered solutions to differing tax considerations.

AI has become a leading factor in personalization in wealth management, helping to facilitate digital finance with the help of fintech. One of the more direct applications of AI is behavioral nudging, which can assist clients; however, a thin line divides persuasion and manipulation that should be taken into account, considering that the AI is managed by the firm.

In addition to nudging, AI is transforming wealth management by streamlining tasks and uncovering insights, but its true value emerges when paired with human judgment, empathy, and trust. The future of advisory lies not in replacing human advisors, but rather in empowering them, combining intelligent AI systems with human insight to deliver personalized, ethical, and client-centered solutions at scale.

Finally, as private markets evolve through tokenization, AI integration, and new fintech digital platforms, they exemplify how hyper-personalization not only shapes access but also reimagines the very architecture of wealth creation. The ability to fractionalize, personalize, and dynamically allocate alternatives is molding how investors interact with illiquid assets across risk profiles and time horizons. Industry leaders increasingly embrace this shift, recognizing that expanded access to private markets is not only a technological advancement but also a strategic imperative for the future of wealth management.

In short, hyper-personalization is a long-term trend and the direction the wealth management industry is heading, and for good reason. When done thoughtfully, it can empower investors, enhance transparency, and develop financial advice that reflects the unique complexity of individual lives. We recommend that firms ensure that the

benefits of hyper-personalization are equitably distributed and ethically delivered, and thus firms must proceed with intention. Ultimately, the success of hyper-personalization will not be measured by the sophistication of its technology but by whether advisors use it to uphold empathy, build trust, and consistently act in the best interests of their clients. To uphold their fiduciary duty in this new era, firms should prioritize three things: ethical AI design that avoids nudging clients toward firm-serving choices, broader access to personalized tools beyond high-net-worth clients, and hybrid models that preserve human empathy at the heart of financial advice. Although some degree of inequality already exists, failing to implement these guardrails could further entrench a two-tiered system, one where the wealthy continue to receive tailored solutions while others are left behind or subtly guided in ways that may not serve their best interests. Personalization has the power to make finance more responsive, inclusive, and human, but only if it is built with those goals in mind.

## Authors' Note

Our paper explores the rise of hyper-personalization in wealth management and its implications for both investors and financial advisors. We examine how AI, direct indexing, behavioral nudging, and expanded access to private markets are reshaping portfolio construction and client engagement, while highlighting the ethical and fiduciary responsibilities advisors must uphold in this rapidly evolving landscape. By offering practical guidance on implementing personalized strategies that prioritize client interests, we aim to help firms deliver financial advice that is both innovative and ethically grounded.

We are deeply grateful to the Sapere Aude Consortium for providing us the opportunity to participate in their Wealth and Investment program and for supporting the perspectives of first-generation students. We extend our sincere thanks to our mentors, Rob Job, Charley Kersten, and Maeve Luparello, whose guidance, insight, and encouragement were invaluable to both our research and our professional growth. This project would not have been possible without their thoughtful support.

## Endnotes

- 1 Saira Shariff, “Powering Wealth Management With Generative AI,” Accenture, July 6, 2025, <https://www.accenture.com/us-en/insights/capital-markets/gen-ai-power-growth-wealth-managers>.
- 2 Chris Baldwin, “What Is Hyper-personalization? Detailed Guide for 2025,” Insider, March 28, 2025, <https://useinsider.com/hyper-personalization/>.
- 3 Steve Edwards, “Beyond ETFs: The Benefits of Direct Indexing,” Morgan Stanley, January 22, 2025, <https://www.morganstanley.com/articles/what-is-direct-indexing-benefits>.
- 4 Victor Murinde, Ephthymios Rizopoulos, and Markos Zachariadis, “The Impact of the Fintech Revolution on the Future of Banking: Opportunities and Risks,” *International Review of Financial Analysis* 81 (May 2022), <https://www.sciencedirect.com/science/article/pii/S1057521922000734>.
- 5 Cameron Howe, “Personalization at scale: The Next Frontier in Wealth Management,” Investipal, January 20, 2025, <https://www.investipal.co/blog-posts/personalization-at-scale-the-next-frontier-in-wealth-management?utm>
- 6 Deloitte, “Disrupting Wealth Management – The Age of Hyper-Personalization,” Deloitte Canada, Deloitte Canada, June 3, 2021, <https://www.deloitte.com/ca/en/Industries/financial-services/analysis/disrupting-wealth-management-hyper-personalization.html>
- 7 “Direct indexing” 55ip. June 5, 2025, <https://55-ip.com/solutions/investment-strategies/direct-indexing/>
- 8 “Investing Smarter With Direct Indexing,” Morgan Stanley, June 6, 2025, <https://www.morganstanley.com/insights/articles/direct-indexing?utm>
- 9 Tony Molina, “Direct Indexing: What Is It and Why Does It Matter?” Range, January 3, 2025, <https://www.range.com/blog/direct-indexing-what-is-it-and-why-does-it-matter>
- 10 “Separately Managed Accounts,” BlackRock, n.d., <https://www.blackrock.com/us/financial-professionals/investments/products/managed-accounts?>
- 11 “Direct Indexing: How It Works, Benefits, and Draebacks,” Long Angle, n.d., <https://www.longangle.com/direct-indexing>
- 12 “Direct Indexing: What It Is and Its Benefits,” Morgan Stanley, January 22, 2025, <https://www.morganstanley.com/articles/what-is-direct-indexing-benefits>
- 13 “ETFs, Make Room: How Direct Indexing Is Becoming Investing’s Low-Fee Future,” Broadridge, n.d., <https://www.broadridge.com/next/articles/etfs-make-room>
- 14 “The Role of AI in Direct Indexing: Unlocking Personalization and Efficiency,” Alphathena, March 3, 2025, <https://alphathena.com/education-center/the-role-of-ai-in-direct-indexing-unlocking-personalization-and-efficiency/>
- 15 Larry Fink, “Larry Fink’s 2025 Chairman’s Letter to Investors,” BlackRock, March 26, 2025, <https://www.blackrock.com/corporate/investor-relations/larry-fink-annual-chairmans-letter>
- 16 Jack Van Dyke, “Direct Indexing: The Smart Strategy Advisors Can’t Afford to Ignore in 2025,” Russell Investments, December 3, 2024, [https://russellinvestments.com/content/ri/us/en/insights/russell-research/2024/12/direct-indexing\\_-the-smart-strategy-advisors-cant-afford-to-igno.html](https://russellinvestments.com/content/ri/us/en/insights/russell-research/2024/12/direct-indexing_-the-smart-strategy-advisors-cant-afford-to-igno.html)
- 17 Jeremi Karnell, “From Data to Decisions: The Power of AI in Financial Advising,” Envestnet, July 2, 2024, <https://www.envestnet.com/financial-intel/data-decisions-power-ai-financial-advising>
- 18 “AI Set to Revolutionize Wealth Management Operations,” LSEG, October 1, 2024, <https://www.lseg.com/en/media-centre/press-releases/2024/ai-set-to-revolutionise-wealth-management-operations>
- 19 CFA Institute, *Investment Risk Profiling: A Guide for Financial Advisors*, CFA Institute, 2020, <https://rpc.cfainstitute.org/sites/default/files/-/media/documents/survey/investment-risk-profiling.pdf>
- 20 CFA Institute, *Investment Risk Profiling: A Guide for Financial Advisors*, CFA Institute, 2020, <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/insights/wealth-asset-management/documents/ey-gl-global-wealth-mgmt-industry-report-04-2024.pdf?utm>
- 21 “Launch of AI @ Morgan Stanley Debrief,” Morgan Stanley, June 26, 2024, <https://www.morganstanley.com/press-releases/ai-at-morgan-stanley-debrief-launch>
- 22 Adrian Murphy, Kate Robu, and Matthew Steinert, “The Investigator-Centered Approach to Financial Crime: Doing What Matters,” McKinsey & Company, June 1, 2020, <https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/the-investigator-centered-approach-to-financial-crime-doing-what-matters?ref=lucinity.ghost.io>
- 23 Alexis Calla and Sandeep Mukherjee, “Could AI Ever Replace Human Wealth Management Advisors?” World Economic Forum, March 17, 2025, <https://www.weforum.org/stories/2025/03/ai-wealth-management-and-trust-could-machines-replace-human-advisors/>.
- 24 Asin Tavakoli, Hoolger Harreis, Kayvaun Rowshankish, and Michael Bogobowicz, “Charting a Path to the Data- and AI-Driven Enterprise of 2030,” McKinsey & Company, September 5, 2024, <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/charting-a-path-to-the-data-and-ai-driven-enterprise-of-2030?utm>
- 25 JPMorgan Chase & Co., *Annual Report 2023*, JPMorgan Chase & Co., 2023, <https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/investor-relations/documents/annualreport-2023.pdf>

- 26 Larry Dignan, “JPMorgan Chase’s Dimon on AI, Data, Cybersecurity and Managing Tech Shifts,” Constellation Research Inc., June 11, 2025, <https://www.constellationr.com/blog-news/insights/jpmorgan-chases-dimon-ai-data-cybersecurity-and-managing-tech-shifts>
- 27 Praveen Kumar Reddy Bandi, “AI-Driven Personalization in Wealth Management: Redefining Client Engagement and Advisory Services,” World Journal of Advanced Engineering and Technology Sciences, June 9, 2025, <https://doi.org/10.30574/wjaets.2025.15.3.1014>
- 28 Rob Burgess, “Shaping Wealth Develops AI-Powered Behavioral Finance Assistant.” Wealth Management, March 21, 2024, <https://www.wealthmanagement.com/artificial-intelligence/shaping-wealth-develops-ai-powered-behavioral-finance-assistant?utm>
- 29 “Mo, an AI Chatbot Powered by Morningstar Intelligence Engine, Debuts in Morningstar Platforms,” Morningstar, inc., May 11, 2023, <https://newsroom.morningstar.com/newsroom/news-archive/press-release-details/2023/Mo-an-AI-Chatbot-Powered-by-Morningstar-Intelligence-Engine-Debuts-in-Morningstar-Platforms/default.aspx>
- 30 “AlphaTree Solution,” WalkingTree Technologies, April 29, 2025, <https://walkingtree.tech/alphatree-solution/>
- 31 Mitch Jackson, “The AI Takeover of Investment and Wealth Management,” LinkedIn, February <https://www.linkedin.com/pulse/ai-takeover-investment-wealth-management-mitch-jackson-nhtmc/>
- 32 “Navigating AI in Wealth Management: Balancing Tech and Human Touch,” Wealth Management, January 2, 2025, <https://www.wealthmanagement.com/financial-technology/navigating-ai-in-wealth-management-balancing-tech-and-human-touch>
- 33 Pratyush Behera, “The Power of Nudge in Wealth Management: Small Changes, Big Impact,” LinkedIn, March 26, 2025, <https://www.linkedin.com/pulse/power-nudge-wealth-management-small-changes-big-impact-behera-em2cc/>
- 34 Private Markets Are Too Big to Ignore and Growing,” UBS, n.d., <https://www.ubs.com/us/en/wealth-management/insights/article.1808083.html#:~:text=With%20USD%2014.3%20trillion%20in%20assets%20under%20management%2C,potentially%20offering%20better%20risk-adjusted%20performance%20and%20enhanced%20diversification>
- 35 Larry Fink, “Larry Fink’s 2025 Chairman’s Letter to Investors,” BlackRock, March 26, 2025, <https://www.blackrock.com/corporate/investor-relations/larry-fink-annual-chairmans-letter>
- 36 “Ripple, BCG Project \$18.9T Tokenized Asset Market by 2033,” Yahoo Finance, n.d., [ps://finance.yahoo.com/news/ripple-bcg-project-18-9t-200946663.html](https://finance.yahoo.com/news/ripple-bcg-project-18-9t-200946663.html)
- 37 “JPMorgan Renames Blockchain Platforms to Kinexys, to Add On-Chain FX Settlement for USD, EUR,” Yahoo! Finance, n.d., <https://sg.finance.yahoo.com/news/jpmorgan-renames-blockchain-platform-kinexys-164254948.html>
- 38 Asset Tokenization in Financial Markets: The Next Generation of Value Exchange, World Economic Forum, May 2025, [https://reports.weforum.org/docs/WEF\\_Asset\\_Tokenization\\_in\\_Financial\\_Markets\\_2025.pdf](https://reports.weforum.org/docs/WEF_Asset_Tokenization_in_Financial_Markets_2025.pdf)
- 39 “JPM Stock Price and Chart - NYSE:JPM,” TradingView, n.d., <https://www.tradingview.com/symbols/NYSE-JPM/>