M RNINGSTAR By All Accounts

Personalization at Scale: How Data Aggregation Enables Tailored Insights

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Introduction

The wealth management industry faces its next transformation through the combined forces of financial technology and an intergenerational transfer of wealth. As in past transformations, the adoption of innovative technologies that serve new client needs will be fundamental to wealth advisory practices.

Mobile investment apps have brought a new generation into investing, making it easier to save — and to make risky bets. Today's self-directed, app-based investors will become the next generation of clients that require high-touch retirement, estate, and investment planning and advice. Additionally, some \$70 billion in wealth will transfer to three younger generations (Gen X, millennials, and Gen Z) over the next 25 or so years. Many of those heirs are digital natives; they will expect more services — including advisory services — delivered through seamless technology applications.

A hybrid advisory model built with cost-efficient technologies can help capture the attention of and serve a new client base — and the critical element to success lies in data. Data collection and digitization enables advisors to obtain an aggregate view of a client's financial information, and the insights to provide systematic personalized advice with greater efficiency and broader client reach at a lower cost. That's personalization at scale. Given today's technology-driven retail experiences, it's something that consumers expect. In a world of personalization, building trusted client-advisor relationships starts with technology-based solutions powered by data and insights designed for wealth management.

In this eBook, we'll provide the basis for understanding how technology and human interactions can drive personalization in financial management, including the tools that are available to glean insights from data and help you assess today's clients and their investing preferences and goals. Personal insights based on enriched data can enable advisors to provide understanding, authentic human connections, and empathy to best serve their clients at scale.

More engaged, long-term clients should result, even among those who start out receiving just basic information on the composition of their portfolios and its impact on their goals and values.

Personalization Now



Personalization allows industries to better serve clients and help them succeed on their own terms. With the help of data designed for wealth and investment management and backed by technology, financial advisors can now do this at scale in a way they couldn't previously.

Online retailers, streaming services, and internet advertising deliver a personal experience, including curated recommendations, to consumers. Consumers now expect the same from all industries, including financial services and investments; they no longer want a one-size-fits-all approach, as the following studies show.

- 77% of consumers expect personalization, and 76% of consumers get frustrated when they can't find personalized options.¹⁻²
- 40-45% of affluent U.S. consumers who switched their primary wealth management firm in the past 24 months moved to a direct, digitally led firm.³
- 72% of clients rate personalization as "highly important" in financial services today, with the percentages increasing for younger consumers.⁴
- 64% of millennial investors and 51% of those aged 35 to 54 claim they're willing to pay more for individualized investment products and services.⁵





- 2 Arora, Nidhi (2021). The Value of Getting Personalization Right or Wrong is Multiplying. McKinsey. https://www.mckinsey.com/business-functions/growth-marketing-and-sales/our-insights/the-value-of-getting-personalization-right-or-wrong-is-multiplying
- 3 Taraporevala, Zubin (2015). The Virtual Financial Advisor. McKinsey. https://www.mckinsey.com/~/media/McKinsey/Industries/Financial%20Services/Our%20Insights/The%20virtual%20financial%20advisor/The-virtual-financial-advisor.ashx
- 4 Capco study (2021). 72% of Customers Rate Personalization a "Highly Important" in Today's Financial Services Landscape. Capco. https://www.capco.com/en/About-Us/Newsroom-and-media/Banking-Survey-Press-Release

¹ Cerulli Associates (2020). "The \$70 Trillion Dollar Opportunity," p. 4. https://image.marketing.cerulli.com/lib/fe3411737164047c7d1072/m/1/158ef2ff-f113-4195-b998-65d01c49656f.pdf

⁵ Bailey, Sabrina (2022). How Hyper-personalisation is Key to Success in Wealth Management. Refinitiv. https://www.refinitiv.com/perspectives/future-of-investing-trading/how-hyper-personalisation-is-key-to-success-in-wealth-management/

Digital Transformation Accelerates

New platforms and business models are democratizing investment. Changes include:

- Disruptive apps that offer free trades and fractional ownership, which are changing the value proposition of existing services.
- Investors with more diverse backgrounds across generational, socioeconomic, and racial and ethnic categories.
- Younger investors willing to take risks and get creative with new asset classes, including cryptocurrencies.
- Older investors, driven by the pandemic, are flocking to digital financial services and advisors who have begun incorporating technology tools and personalization options into their services.

Growing retail demand and changing expectations have made investor-first digitization imperative to long-term success.





How Personalization Builds Deeper Client Relationships



Personalization strategies that rely on technology to provide light yet intelligent touches to a broader range of investors can help advisors strengthen their connections, enhance communication, and maintain their competitiveness in the digital age.

Personalization helps advisors live up to expectations and better align with their clients' financial needs and demands. Additionally, it helps advisors differentiate a practice and adds value beyond standard offerings.

Personalization is goal-oriented. It provides a focus on the goals and values that matter most to clients. That may not be retirement; it may be funding a wedding, buying a house, or saving for college. And the priorities of those goals may shift over time.

It's also important to note that some goals are even more basic. About 40% of Americans have less than \$300 in savings,⁶ and only about 30% of Americans have a long-term financial plan.⁷ The pandemic only made things worse for many people, and it's estimated that the lack of financial literacy cost Americans a whopping \$415 billion in 2020.⁸





6 Bizouati-Kennedy, Yaël (May 2021). Go Banking Rates. Americans' Savings Drop to Lowest Point in Years. https://www.gobankingrates.com/banking/savings-account/exclusive-covid-report-40-americans-less-300-savings/

7 Mitic (August 2022) Fortunly. What Happened to Your Paycheck? Personal Finance Statistics for 2022. https://fortunly.com/statistics/personal-finance-statistics/#gref

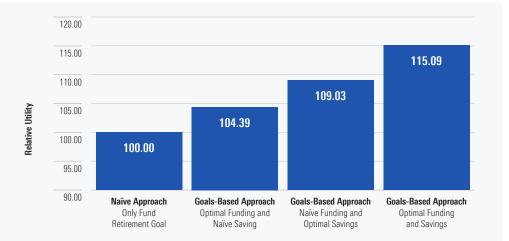
8 National Financial Educators Council (Jan 2021). Survey Results: Deficits in Financial Literacy Cost Americans \$415 Billion in 2020. https://www.prnewswire.com/news-releases/survey-results-deficits-in-financial-literacy-cost-americans-415-billion-in-2020-301201971.html

Moving Toward a Goals-Based Framework

Personalization means a shift away from a performance-centric framework, moving toward a goals-based framework for advice.

David Blanchett demonstrated as much in 2015 with his paper entitled, "The Value of Goals-Based Financial Planning," in which he estimated that using a goals-based framework to determine which goals to fund and how to fund them can lead to an increase of 15% in wealth for a hypothetical household versus a naïve strategy that focused solely on funding retirement.⁹ This is equivalent to generating an annual alpha of 1.65% for the lifetime of the base scenario household.⁹

"While households may seek to accomplish similar goals, the magnitude and relative importance of the goals they wish to accomplish are likely to vary significantly. Therefore, each goalsbased financial plan should be unique to that client." In other words, goals-adjusted plans must be personalized.⁹





Data Aggregation: The Personalization Facilitator

Aggregated financial data is your most valuable personalization asset. Data aggregation facilitates the client insights that build trust because they are based on that individual's real financial experience, not simply a typical demographic model; it's the enabling technology that integrates disparate data sources into a whole.

Data on asset allocation, portfolio risk scores, environmental, social, and governance (ESG) ratings, cash flows, etc., enables advisors to uncover goals that will resonate with clients, and tailor financial planning and analysis solutions so they can give better informed financial advice to clients.





Data Insights for Personalization

Superior investment-data aggregation requires enrichment, analysis, and processing to provide the highest quality data. The process of aggregated data designed for wealth and investment management includes:

- Broad data sourcing and integrations
- Normalized and enriched data for investment use cases
- Delivery of data based on unique needs of the receiving system
- Seamless connection and access to investment insights



Highest-Quality Data

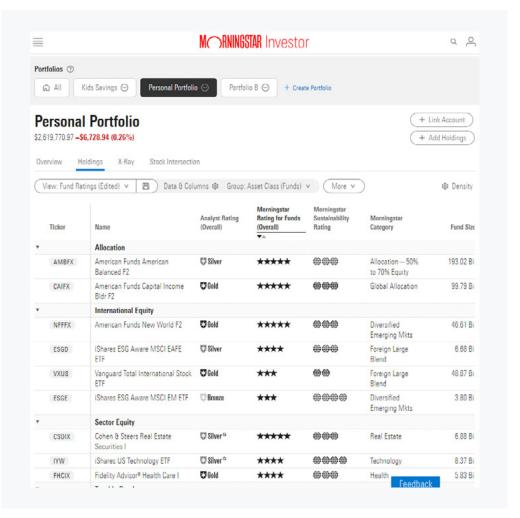
Proprietary Normalization and Enrichment

ACQUIRE	PARSE	NORMALIZE	ENRICH	DELIVER
Connect to source and pull data	Sort data into structured format	Fix incomplete / ambiguous elements	Map positions and transactions to their symbols	Adapt data for destination system handling
		Translate data into standard types	Append data with internal Morningstar ID	
More breadth and depth than the competition	Sophisticated data model built for investment use cases	Proprietary process, based on 22 years of institutionalized knowledge, Al, and machine learning	Unlocks ecosystem of Morningstar Solutions	Tooling eliminates need for pricey custom development and manual intervention
		Highest quality output		

based on Morningstar Security Master



Enriched and normalized data designed for personalization can be tailored to show clients what's most important to them, whether it's returns, risk, fees and expenses, or environmental impact scores.

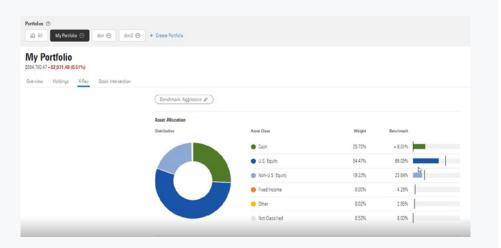




Personal Portfolio and Risk Analysis

One of the many benefits of aggregated data is its ability to simplify risk analysis as part of the common financial planning workflow. An advisor can assign clients to a risk profile such as "conservative" or "aggressive" based on their risk tolerance and the time horizon for their financial goals. The client risk profile can then be used as a benchmark to evaluate the suitability of an investment portfolio.

For example, the combination of aggregation and risk-scoring capabilities, security-level risk is rolled up at the portfolio-level according to weight. From there, a total portfolio risk score can be calculated. This process of checking whether the personal risk profile (the benchmark) and the portfolio risk score are aligned can be applied to a client's existing investments during the onboarding phase or to a proposed portfolio during the investment planning phase. It can even be automated once a proposal is implemented for proactive portfolio monitoring.







Incorporate Personal Values

A lot has been said about incorporating personal values into investment decisions and portfolios. Personal investment data enriched with ESG metrics such as sustainability or carbon risk ratings can empower advisors to align their client's investment strategy with their values. They can even go the extra mile to put limits on the client's portfolio exposure to industries like small arms, tobacco, or fossil fuels.



Current Sustainability Score based on 98.61% of Corporate AUM and – of Sovereign AUM | Global Category: US Equity Mid Cap | Sustainability Score and Sustainability Rating as of Sep 30, 2022. Portfolio as of Sep 30, 2022. Sustainability Score ISSG Provides issuer-level ESG Risk analysis used in the calculation of Morningstar's Sustainability Score. Sustainability Score Sustainability S

Use Technology Throughout the Client Journey



For decades investment advisors have relied on technological advances to manage client accounts and needs. Today, data and analytics are combining to support the process from client acquisition through account servicing.

A future-oriented advisory workflow could include the following data-oriented enhancements:

Step 1: Prospecting. Social media data to identify promising clients.

Step 2: Client Profiling/Goal Planning. Digital information gathering, collaborative scenario analysis tools for real-time iterative goal prioritization conversations.

Step 3: Portfolio Construction/Investment Planning. Personalized portfolios that incorporate social, political, and environmental values.

Step 4: Onboarding. Trackable online process facilitated by digital account opening and online transfers for portfolio funding.

Step 5: Portfolio Management and Monitoring. Continuous net worth performance reporting and proactive portfolio monitoring enabled by account aggregation and high-quality investment data enriched with portfolio insights and combined with automated portfolio rebalancing.



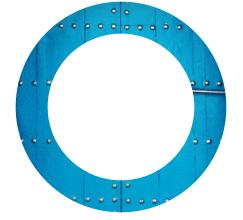


Future Directions

Investment personalization is here to stay and it's not limited to big tech. Advisors who use technology to deliver personal insights and information will differentiate themselves with the next generation of innovation-forward investors. The stakes are high as today's new investors stand to inherit roughly \$30 trillion to \$70 trillion in "the great wealth transfer."¹⁰

As a result, it's important for advisors to reassess their target clients and technology tools to include personalized, dataenabled insights that incorporate future wealth management trends, including:

Further tech advances: Open banking is enabling safer account aggregation and democratizing access to financial services. Technology and automation are making it possible for advisors to provide more clients with the kinds of sophisticated portfolio management strategies and other trading advice historically offered only to high-net-worth individuals. Automated trading algorithms can determine best price, process bulk orders, and rebalance portfolios.¹¹







10 Cerulli Associates (2020). "The \$70 Trillion Dollar Opportunity," p. 4. https://image.marketing.cerulli.com/lib/fe3411737164047c7d1072/m/1/158ef2ff-f113-4195-b998-65d01c49656f.pdf

11 Le, Robert (2020). A New Era of Wealth Management: Fintech startups are giving financial advisors new tools to compete in a digital economy. Pitchbook, Research



Sustainable investing: Tomorrow's wealth-holders will retain a deep interest in sustainability, ESG investing, and social concerns regardless of current market trends. Ninety-five percent of millennials and 97% of Gen Z-ers who were familiar with ESG investing said that a company's performance on ESG factors was an important factor when choosing investments.¹² Global ESG assets are on track to exceed \$53 trillion by 2025, representing more than a third of the \$140.5 trillion in projected total assets under management.¹³

Direct indexing: For advisors looking for greater choice and flexibility in their practice, direct indexing solutions allow for the creation of tax-efficient portfolios at scale. Direct indexing strategies can deliver personalization through additional tailoring for ESG themes, product involvement, and individual security and sector exposures based on a client's unique needs and preferences.



12 0'Donnell, Grace (September 2021). ESG investing is not yet popular but important to those who know: Survey. Yahoo Finance. https://finance.yahoo.com/news/esg-investing-america-134401192.html

13 Martin Adams, Gina (2021). ESG Assets May Hit \$53 Trillion by 2025, A Third of Global AUM. Bloomberg Intelligence. https://www.bloomberg.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/

Morningstar ByAllAccounts

Morningstar[®] ByAllAccounts[®] is committed to empowering advisors and their investors with high-quality financial data tailored to investment use cases. For more than 20 years, ByAllAccounts has provided data connections integrated into advisors' Wealth Management platforms via data aggregation.

ByAllAccounts data provides a complete view of finances with deep data sourcing from wealth- and investment-management institutions. It's normalized across institutions to provide consistent data for analysis regardless of the investment or custodial source.

More important for personal analysis, ByAllAccounts data enables highly personalized insights and servicing. ByAllAccounts aggregated data, appended with Morningstar Security IDs, can be seamlessly integrated into Morningstar solutions such as Morningstar analyst reports, star ratings, and sustainability scoring.





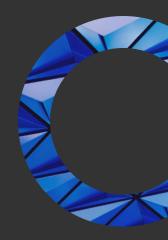


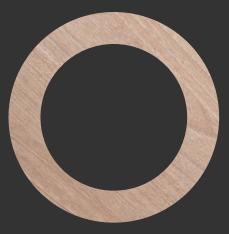
Complete View of Finances



ByAllAccounts retrieves data from the full gamut of financial sources, including banks, credit card providers, lenders, investment firms, and insurance companies, to present investors' full financial picture. We have connections to more than 15,000 data sources with a focus on investment data. ByAllAccounts data sources are based on more than 20 years of requests coming from investment professionals, resulting in a high percentage of direct custodial feeds. Our comprehensive approach to investment data sourcing includes:

- All major investment custodians.
- Banks, brokerages, fund companies, insurance companies, trusts, clearinghouses, stock ownership plans, venture capital firms, digital assets, 529s, and advisor-facing (managed account) sources.
- Complex asset types such as annuities, REITs, and alternatives.
- Industry-leading support of 401(k) recordkeeper sources.
- New connections for customers built upon request.





Highly Accurate Data

ByAllAccounts is a sophisticated investment-first data aggregator that acquires and enriches data specifically for investment use cases, such as performance reporting. Our solution is powered by artificial intelligence, machine learning, and more than 20 years of institutionalized knowledge. At the core of the enrichment process is the use of the Morningstar Security ID.

Using a five-stage enrichment process, ByAllAccounts delivers data that is complete, consistent, interoperable, and actionable:

Acquire: Data is gathered from a variety of financial sources.

- **Parse:** The collected data is sorted, organized, and structured into a sophisticated data model for investment use cases.
- **Normalize:** Any incomplete or ambiguous data elements are translated into standard data types. The data is made consistent and complete.
- **Enrich:** Related positions, transactions, and securities are linked together, and any gaps are filled so the data becomes actionable.
- **Deliver:** The data is prepared and delivered in a variety of configurable formats tailored to the unique requirements of the customer's reporting platform.



An Ecosystem of Insights



Morningstar is uniquely positioned to anticipate, inform, and respond to evolving market trends in the financial services industry. ByAllAccounts appends data with internal Morningstar Security IDs to make integration with other Morningstar products and services easy. As a result, advisors can derive personalized insights on aggregate investment data. Examples include:

Curated Research and Editorial Content - Gain actionable insights from Morningstar's independent research and editorial content to identify and select the investments that meet your clients' criteria, monitor investment performance, and inform how you communicate investment decisions with your clients.

All Portfolios Watchlists Insights Following BRK.B: Berkshire Hathuway Inc Class B	Insights Go to Morningstar.com >	
Berkshire Hathaway's 13F Filing Highlights Continued Commitment to Buying Equities in Third Quarter	What to Invest in During High Inflation Margaret Giles * Nov 10, 2022 What's Your Real Inflation Rate? Christine Benz * Sep 16, 2022 Which Inflation Hedges Have Worked?	
Greggory Warren = Nov 16, 2022 VZ Verizon Communications Inc		
The U.S. Wireless Carriers Are Poised to Gush Cash; Verizon Shares Particularly Attractive		
Michael Hodel + Nov 16, 2022	John Rekenthaler + Sep 8, 2022	
HD The Home Depot Inc		



Combined with aggregated account data, further curate the Morningstar content automatically by filtering for holdings in your clients' portfolios and themes of your choosing.

Enterprise Components - Enhance your platform with digital tools that help clients make better investment decisions:

- Engage and educate: Gauge the financial health of investors and discover new ways to involve them in the discussion about what they want to achieve and when.
- Analyze portfolios: Evaluate what's in a portfolio, diagnose its strengths and weaknesses, and see how it would behave under certain macroeconomic scenarios.
- Monitor portfolios: Track how a portfolio is performing with access to historical tick data, news, stock quotes, and an overview of the markets.

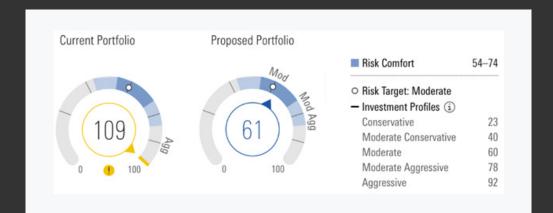
Morningstar Risk Ecosystem - Provide clients peace of mind when risk is realized by accurately assessing their risk tolerance and measuring the compatibility of any given portfolio against their risk profile and investment objectives.

• Leverage best-in-class psychometric risk assessment to determine clients' risk tolerance, especially in volatile times, using academically validated methodology.





 Provide personalized investment guidance that aligns risk tolerance with financial goals and time horizon while staying compliant.



ESG Investing Solutions/Sustainalytics - Navigate the landscape of sustainable investing with Morningstar's ESG solutions including sustainable investment strategies and security-level ESG research and ratings.





Conclusion

Data focused on wealth management sources and enriched with a broad range of investment insights help financial advisors bring a client's personal financial picture into focus. Basing financial insights on a unified view of an investor's financial life and investment data helps advisors build a personalized plan based on a client's current financial net worth, in addition to their investment goals, values, and risk tolerance.

Using technology, advisors can make connections across their entire client base to tie clients more closely and personally to their goals and portfolios. Personal insights derived from richly aggregated data analyzed to fit personal preferences and values can serve as ways for clients to see the portfolio not as a commodity but as an extension of themselves.