The Changing Future of Investment Management

Insights from $50 trillion+ of interviews with industry leaders across the world

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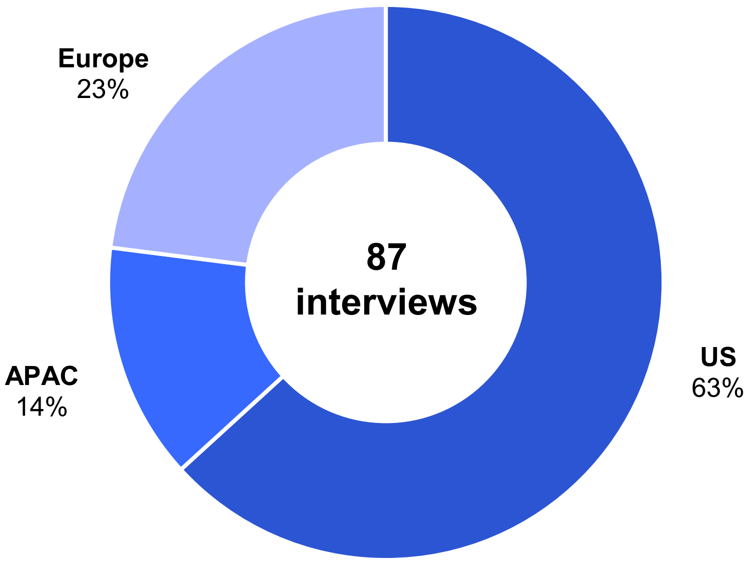
Digital and Industry Advisory Services - Part of FIRST (Franklin Innovation Research, Strategies & Technologies)

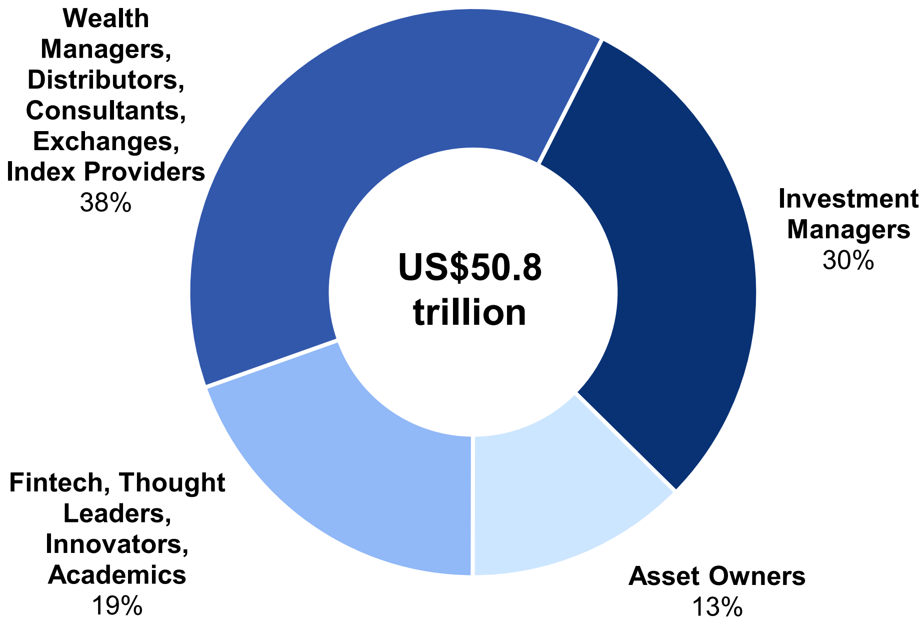
Our 2024 Future of Investing report is based on interviews of leaders of firms controlling US$50.8tn of assets, as well as disruptors/outsiders

Interviews spanned asset managers, asset owners (pensions, insurers, E&Fs), wealth managers, distributors and intermediaries, academics and consultants, fintechs and blockchain and digital asset specialists

Breakdown of Interviews by Geography
[by location of global headquarters]



Breakdown of Interviews by Organization Type



Data as of October 2024.

Key Topics from this Year's Future of Investing Survey

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Our annual publication series crystallizes and synthesizes the strategic implications for the future of wealth and investment management from off-the-record free-form interviews with CEOs, CIOs, COOs, heads of strategy, business heads, academics, thought leaders and disruptors from inside and outside the industry.

Drivers of change and their implications: new technologies, changing client expectations, new investment options, and expanding regulation	The **expanding uses of ETFs** and their role in accelerating the industry's adoption of new technology, movement towards a digital infrastructure, and broad asset tokenisation	How the **changing nature of money** and the increasing number of assets able to act as money are reshaping the future and scope of investment management	**New models**: competition *for* capital for wealth managers; investment *of* capital by investment managers; returns generated *from* capital for investors
How **demographics** is challenging the "one size fits all" platform approach to advisory → strategic implications for **wealth management business models**	Constructing and managing portfolios combining traditional and digital alternatives + **new investment options and wealth management opportunities**	New forms **of portfolio alignment and client value**	**Robo 3.0**, the **Advisor of the Future,** and the Client of Today
AI and **active management**	The far-reaching and varied **implications for asset owners and asset managers** of applying the **blockchain** technology being explored by payments to upgrade our 50yr old infrastructure	**New delivery options**: assets, wrappers, vehicles, solutions and services	**AI** and the future of wealth management

Chart source: Franklin Templeton Industry Advisory Services.

The Changing Future of Wealth Management

The changing business, product and competitive landscape for wealth management is driving the industry towards a very different future from the one it is optimized for, but there are also aspects of wealth management which *haven't* changed.

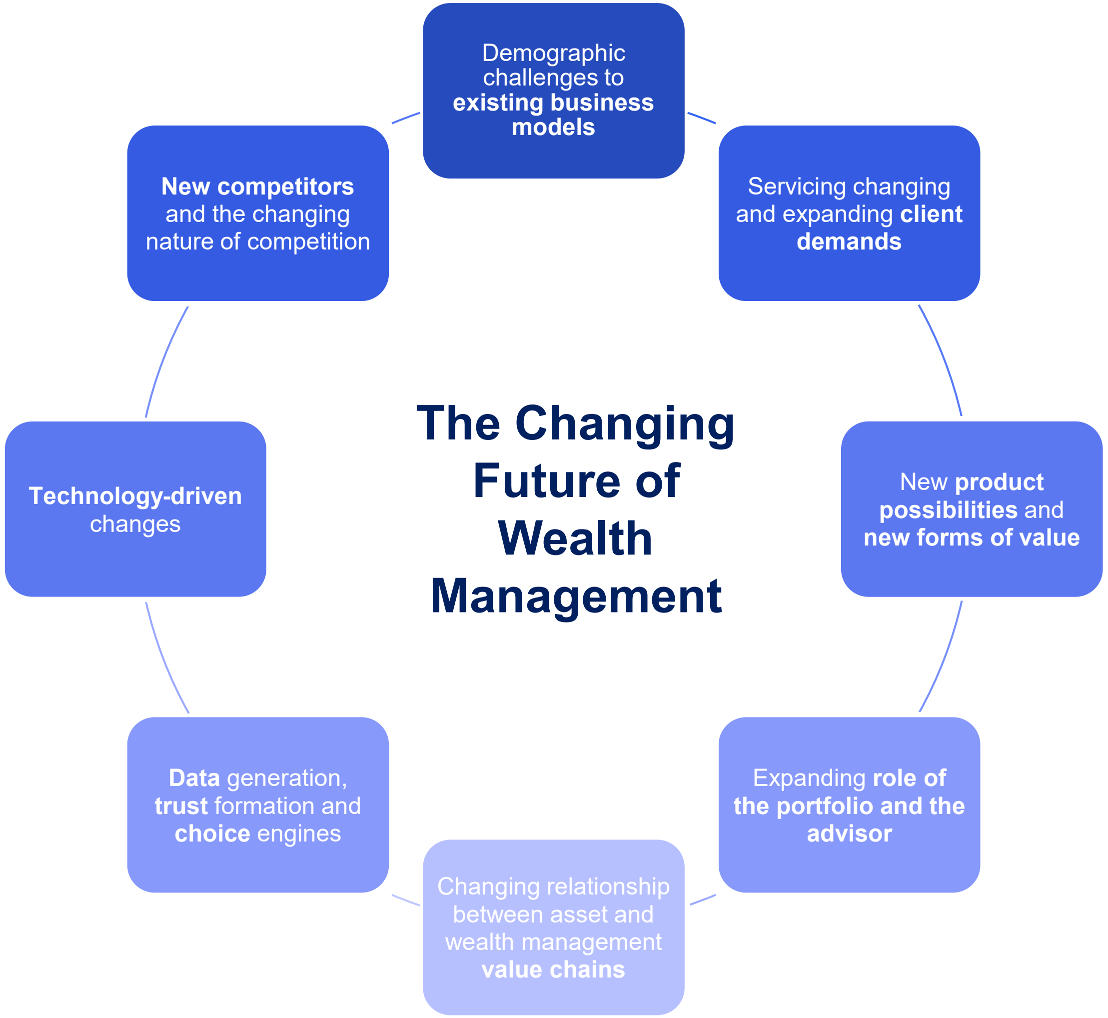

Chart source: Franklin Templeton Industry Advisory Services.

What It Means for <u>You</u> = What We Are Going to Talk About Today

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Navigating the changing future of wealth management starts with recognizing and understanding the dynamics reshaping that future and their implications for your competitive advantage.

Drivers and dangers of **change**

The **portfolio** of the future

The future of **competition**

The **advisor** of the future

"The future is already here.
It's just not evenly distributed."

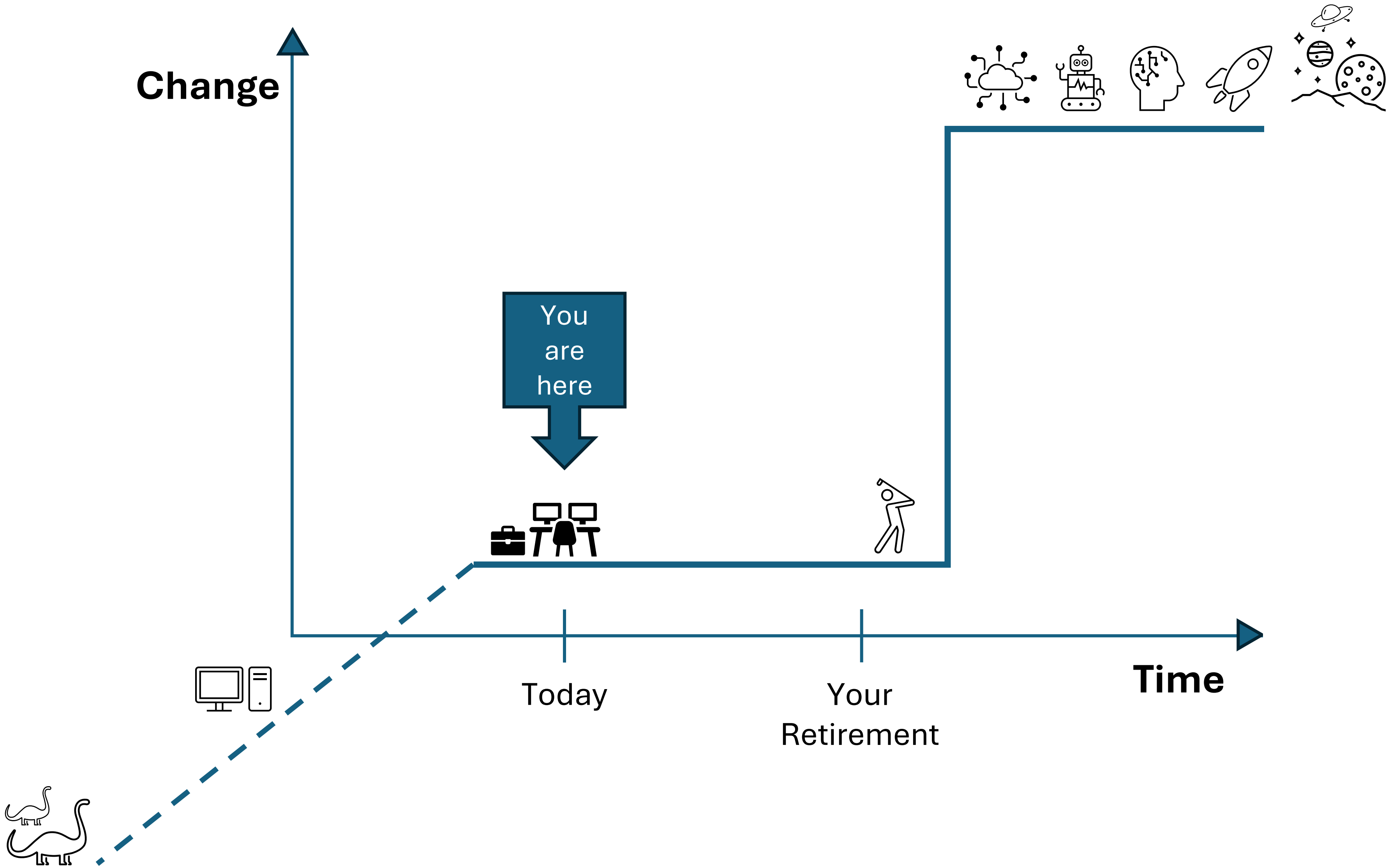
William Gibson

"The revolution will not be televised"

Gil Scott-Heron

The Prevailing Mental Model of Industry Change

“Change is something that happens in the future, or to someone else, or somewhere else. Change is a choice”.



The Danger of Being Blindsided by Change

Blindspots and bugs in the human operating system, and making sure this isn't our Kodak/Blockbuster moment.

"It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so"

Mark Twain

"Everybody has a plan until they get punched in the face"

Mike Tyson

- The dominant model of industry change
- Haven't we seen this movie before?
- Misconceptions about change
- How the world is changing
- Relevance to investing

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Drivers of the Changing Future of Wealth Management

These pressures are re-shaping multiple aspects of how the industry works—requiring more reliance on tech-driven models, fostering a growing need for partnership, and forcing new thinking about the scope and delivery of investments

A New Technologies

- Expanding **AI capabilities** and adoption of crypto-inspired **blockchains, wallets, smart contracts and tokenization** are paving the way to adaptive smart automation, shorter and faster process chains, more shared utilities and open-architecture platforms, and real-time dynamic modelling and decision-making in investing and advisory
- The application of new technology to **interaction, trust-building, longitudinal data generation, and orchestration of personalised value creation** will change the competitive landscape for wealth managers.
- Expanding use of **APIs** will unlock the functionality and data from proprietary platforms, allow capabilities to be distributed, and facilitate better + wider 3rd party integration

B Changing Delivery Expectations

- Individuals are looking for **consumer-app-like ease of use and an enhanced digital experience** that embeds services with or in client networks
- New crypto models allow for **24/7/365 access**, enhanced connectivity, **faster processing**, improved transparency, and **more efficient use of assets**
- Family offices are buying or building **tech platforms to bring together complex, multi-jurisdictional portfolios** and support enhanced communications and activities across generations and peer groups
- Institutional investors are looking for **specific opportunities and creative problem-solving** from those managing and advising their capital

C Regulatory Pressures

- **New consumer protections** require increased transparency, aligned interests, and higher standards for both investment managers and advisors
- A growing set of data rules create new requirements for **accessing, managing and sharing consumer data**
- A growing set of international **digital asset and crypto-related regulation and frameworks** are helping to bring new technologies, assets and practices in alignment with traditional finance

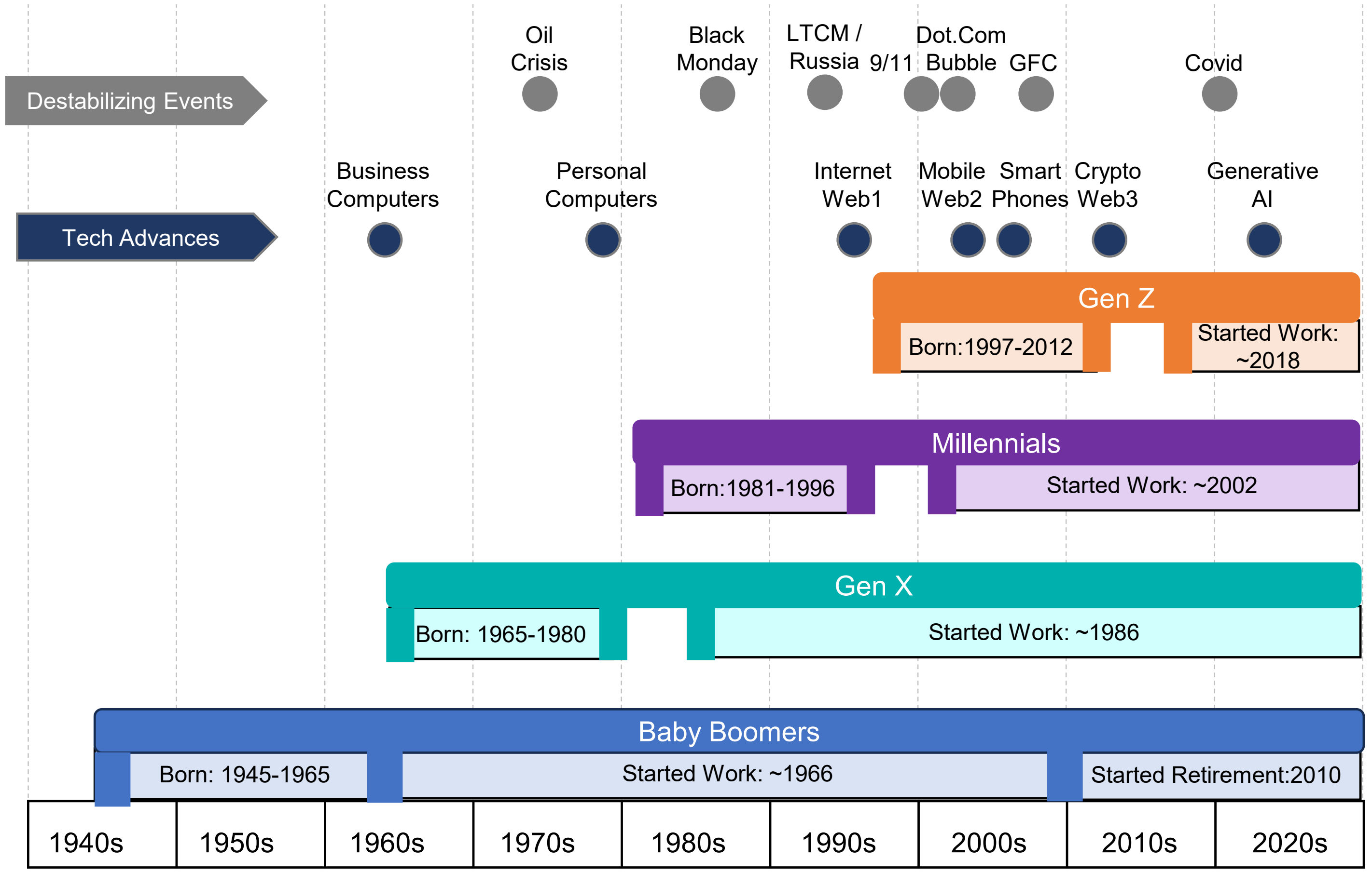
D New Investment Options

- **ETFs' utility is expanding** as active managers use redemption in-kind mechanisms to transport groups of securities, and the ETF wrapper is used to give exposure to new types of assets
- **Individual investor exposures are becoming more targeted** due to growing use of individual accounts and **more diversified** due to the "retailization" of alts
- **Institutional investors are becoming more active** leveraging their longer time horizons and networks to co-invest, directly invest and partner with each other
- **Tokenization** is **creating new assets** and **use cases for traditional assets**

The Foundation of Generational Differences

Events have benefitted the Baby Boomers but have presented significant challenges to subsequent generations whose needs and attitudes towards investing and wealth have been shaped by their very different formative experiences

Life-Shaping Events by Generation



- Last year's survey revealed a surprising, but widely-shared, view that the traditional investment management industry was **designed for and by Baby Boomers**
- Baby Boomers enjoyed an unprecedented period of stability and growth that allowed them to defer consumption and pursue long-term accumulation strategies in their portfolios
- Subsequent generations face a very **different set of economic circumstances** and more immediate financial pressures
- Their **attitudes to investing and wealth have been** shaped by a succession of crises and global events, and their service expectations have been shaped by advances in consumer technology

Chart source: Franklin Templeton Industry Advisory Services.

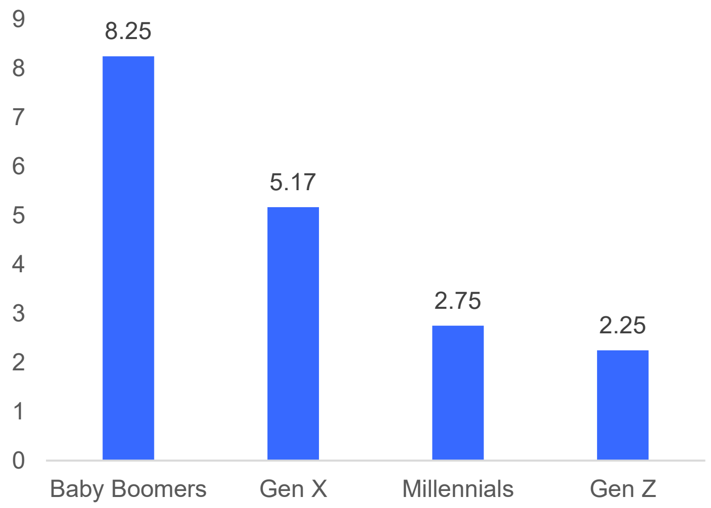
Divergent Generational Needs & Views

Generational events have benefitted the Baby Boomers but stressed subsequent generations, impacting both their working patterns and their attitudes to wealth and advice.

Shorter job tenure – whether voluntary or involuntary - makes building traditional pension savings more challenging

- Lower savings and greater immediate financial demands mean traditional wealth management is less relevant

Average Years in a Job by Generation



Attitudes to investing and advice are different for younger generations

- Social media is the #1 place for Millennials (75%) and Gen Z (91%) to get investment information vs advisors (33% and 32% respectively)[4].
- Expectations of the portfolio differ, as well as returns from different asset classes
- A FINRA/CFA study found that Millennials and Gen Z were more likely to invest in crypto and NFTs[5]

Trust is formed differently

- Although younger generations may have similar financial needs to Baby Boomers when they get to middle age, who they trust to help them meet those needs + what they trust to invest in is very different
- There are analogue and digital routes to trust

Gen X is the first generation to be worse-off than their parents

- on measures of retirement readiness, wealth accumulation, cost of living, upward mobility[1]
- Gen X is carrying a higher **debt load** than earlier and later generations:
  - 17% higher than Baby Boomers
  - 26% higher than Millennials[2]

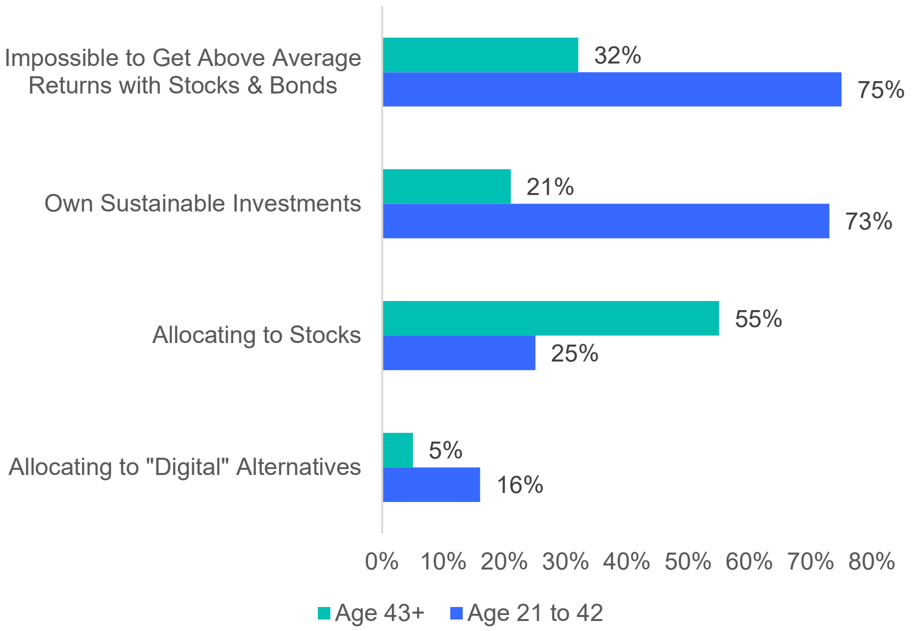
- **Millennials**' left college with record levels of student debt[3] but found work slow to find entering the job-market in 2007-2009.
- They also saw the social and economic effects of the Global Financial Crisis on their families and friends.

Please see Appendix for source information.

Public vs Private Markets and Attitudes to Wealth Creation

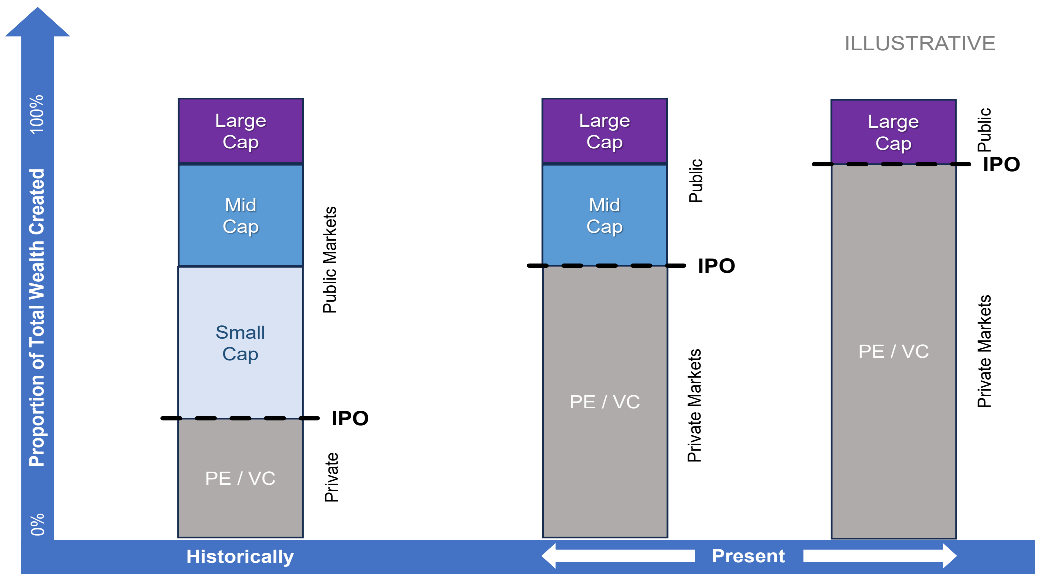
Generational differences cut across public markets and alternatives

Bank of America Private Bank Study



Different generations exhibit marked differences in their attitudes to investment and specific asset classes

Shift in Access to Growth Opportunities



A greater proportion of wealth is being created in the private phase of a company's life

1. Source: Bank of America Private Bank Study Finds Younger Investors Turning to Alternatives, Sustainability and Digital Assets to Create Wealth." Bank of America. October 11, 2022.
2. Source: Franklin Templeton Industry Advisory Services.

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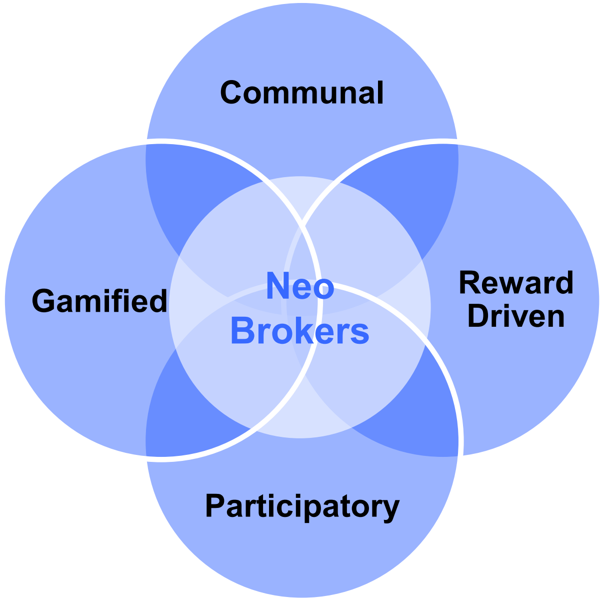
The Strategic Significance of Neobrokers

A new competitor targeted at younger generations is already offering a “social” style of investing. This differs significantly from the expertise-driven investment management industry and AUM is expected to reach $606B and support 87M users by 2028[1]

- Personalized newsfeeds related to holdings, models they follow, and actions taken by friends they follow with embedded discussion threads
- Contextualized provision of relevant Financial Influencer content[2]

- Able to trade $100,000 virtual portfolio
- Encouraged to use platform tools to learn about investing[3]



- Fractional stock awards in public companies where they shop most[4]
- 1% match on 401(k) accounts[5]
- Rewards “scratch card” for depositing first $10[6]

- One-click ability to follow peer-generated model portfolios that direct fees to the model creator based on assets copying the strategy[6]

Neo-brokers offer mobile investing apps with simple user interfaces, easy account onboarding, no wealth-based exclusion, and use mechanisms to link investing to an individual’s online social identity

5 key aspects of neobrokers:

1. **Attracting new investors:** 47% of TradeRepublic users had never invested, including 18.6% of investors aged 35-48[7]
2. **Engaging younger users:** a German study found 70% of users <35[7], the same age as a French neo-broker study which also put the average age of investors as a whole at 50[8]
3. **Increasing market share**: European neo-brokers increased market share of active clients from 6.8% to 19.2% while traditional distributors fell from 71.6% to 56.3%[8] (19Q3-21Q3)
4. **Embedding passive investing**: BlackRock’s reported expectation is for 10M new European investors in ETFs representing and additional +€500B of demand by 2026[9]
5. **Creating new investing template**: Growing number of neo-brokers are including crypto (and looking at NFTs) as a new type of alternative allocation in their robo models

Please see Appendix for source information.

The Emergence of Individually-Sized "Alternative" Alts

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The digital alternatives being offered by neobrokers are part of a much bigger expansion in the investible universe of assets, how we think of an asset, and how we use them

Characteristics of new investment products targeted at individuals

Accessibility & Ease of Use

Internet and mobile-app based offerings with intuitive interfaces and easy onboarding, direct link to individual's payment source, in-app knowledge building and tools, one-click transactions

Multiple Liquidity Options

Cryptocurrencies tradeable 24/7/365; Collectable (sports memorabilia site) has a built-in secondary market[1]; Moonfare (PE marketplace) creates semi-annual auctions[2]

Regulated

Each category except crypto has been brought into regulatory frameworks

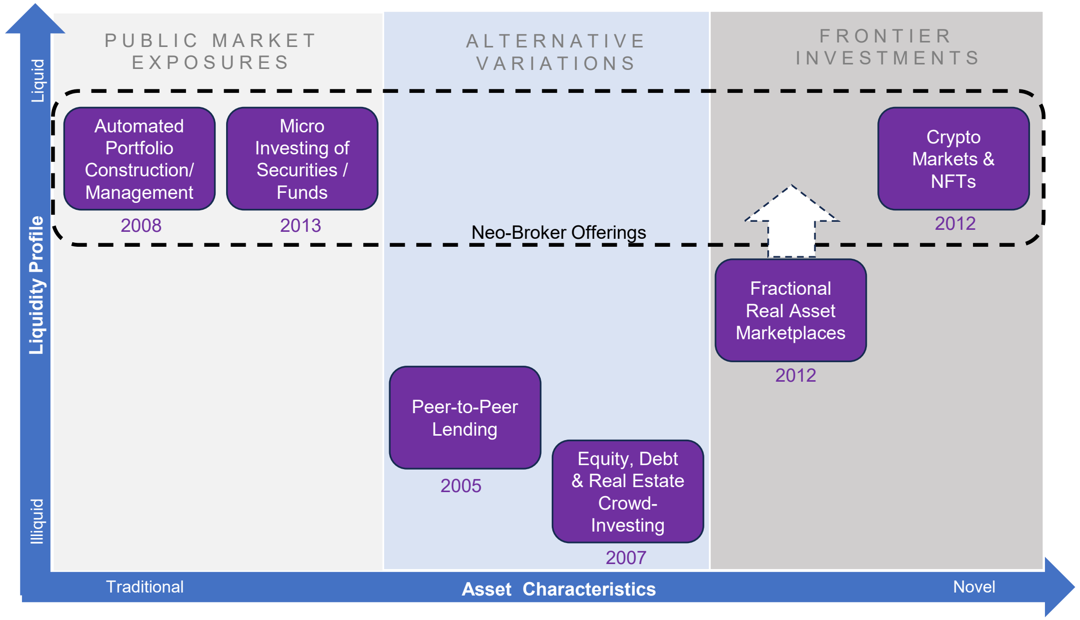
Relatable Investments

P2P lending and crowdfunding emulate traditional alts but focus on easily understood investments, e.g., personal and home equity loans, art, song royalty rights (SongVest)[3], collectible platforms offer sports memorabilia, vintage comics, classic cars, video games

Low Minimum Investment Size

Minimums as low as $1 and low minimums for specialist platforms, e.g., Prosper $25 min loan size[4], Vinovest $1,000 min for a professional sommelier to build a wine portfolio,[5] EstateGuru €1,000 min for commercial real estate[6]

Neo-Brokers Utilize Crypto, Explore Collectibles as Alternatives Diversifier



- **Neo-brokers' asset allocation models are including digital frontier assets**: e.g., using crypto as a diversifier and risk asset; future fractionalized collectibles via NFTs
- The **ability to directly own intangible assets** + the expansion of **what represents an asset** + **new models of value creation** have the potential to change the future of investing

Please see Appendix for source information.

The Portfolio as a Source of Personal Enrichment

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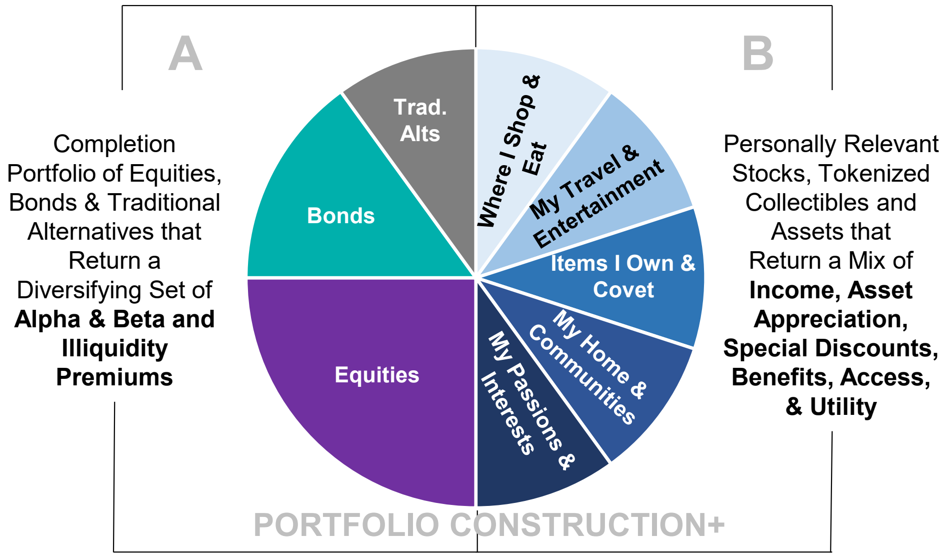
Designing the portfolio to deliver personally relevant benefits and engagement as well as financial returns would create the type of alignment that younger generations need and desire while not compromising long-term goals

- **Ongoing evolution and expansion of portfolio goals**
  - Generic accumulation maximization strategies expanded to include complementary financial goals, e.g., risk levels, volatility, liability matching.
  - Pursuit of financial goals are in turn being informed by wider societal or environmental considerations for some investors.

- More **personally relevant portfolios**
  - The portfolio is becoming a vehicle for the achievement of more than simply financial goals. Enabling technologies and changing attitudes to investing are moving us towards aligning portfolios with a **personal mix of values, interests, lifestyle and needs.**
  - **New dimensions of utility** are possible to support individuals' **day to day living**, not just their future life beyond retirement.

Bringing Together Expertise & Social Identity in the Portfolio



Possibilities for **additional value streams** generated by a portfolio

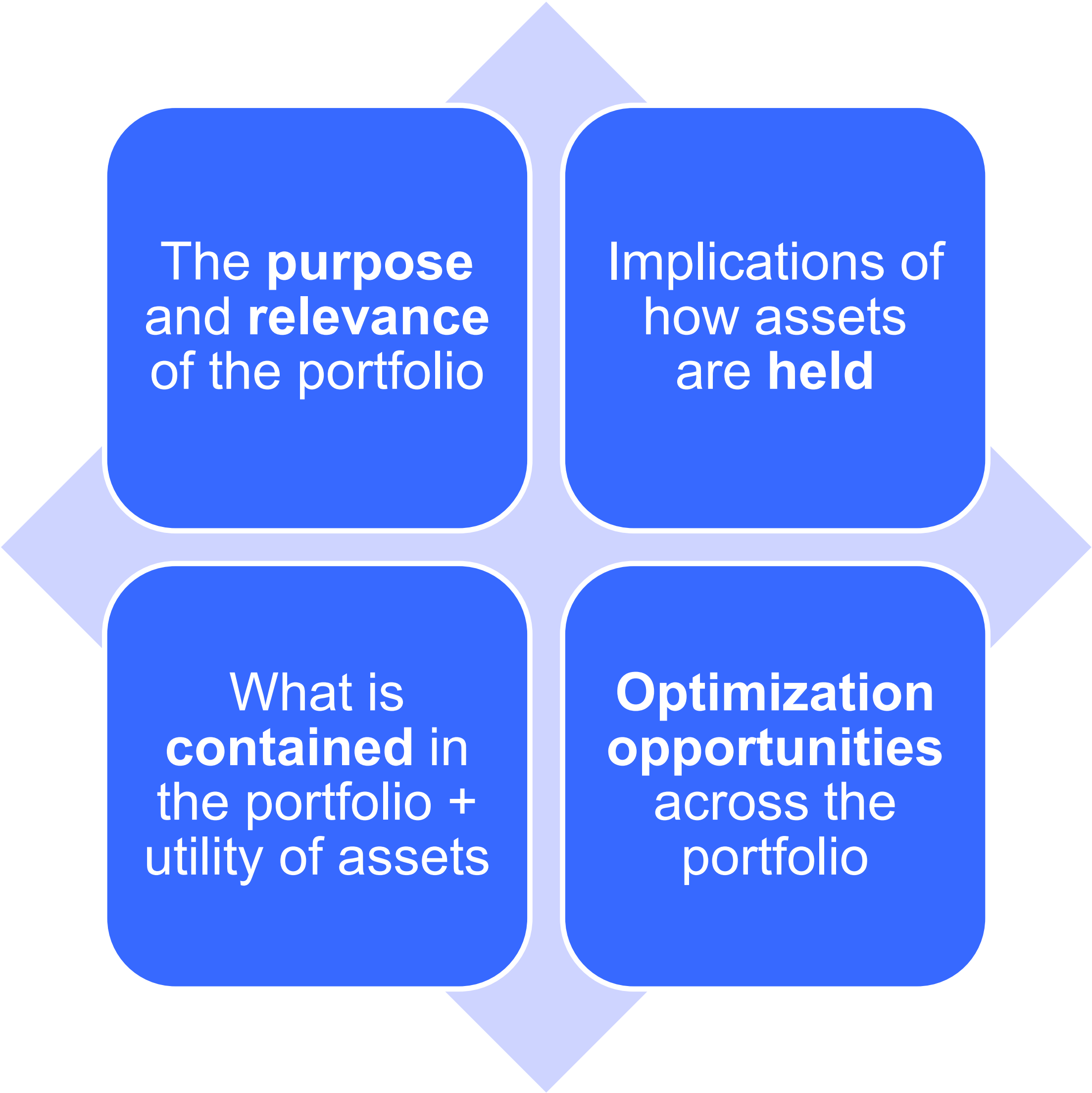
- **Discounts and ownership rewards** for where money is regularly spent
- **Connection** with community of like-minded peers + related tools/services
- **Incremental income sources** from new asset monetization opportunities
- **Experiential components** can be structured into financial investments

- **Individual-centered portfolio construction, optimization and completion →** requirement for **deeper understanding** of the individual – who they are, how they live, their preferences (revealed + stated) and interests + need for the wealth and asset manager to work closely together
- **Wealth platform and advisor** – profile creation and enrichment + maintaining alignment of the portfolio + highlighting personal concentration risks + portfolio optimization advice
- **Investment manager** – sourcing and creating the instruments relevant to individual client needs + completing the portfolio + providing diversification + balancing overall risk-adjusted financial and experiential return

Chart Source: Franklin Templeton Industry Advisory Services.

The Evolution of the Portfolio

The portfolio of the future will be characterized by much greater flexibility, alignment, breadth of assets, engagement, utility, and day-to-day relevance to the client



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Expansion of Money & Money-Like Instruments

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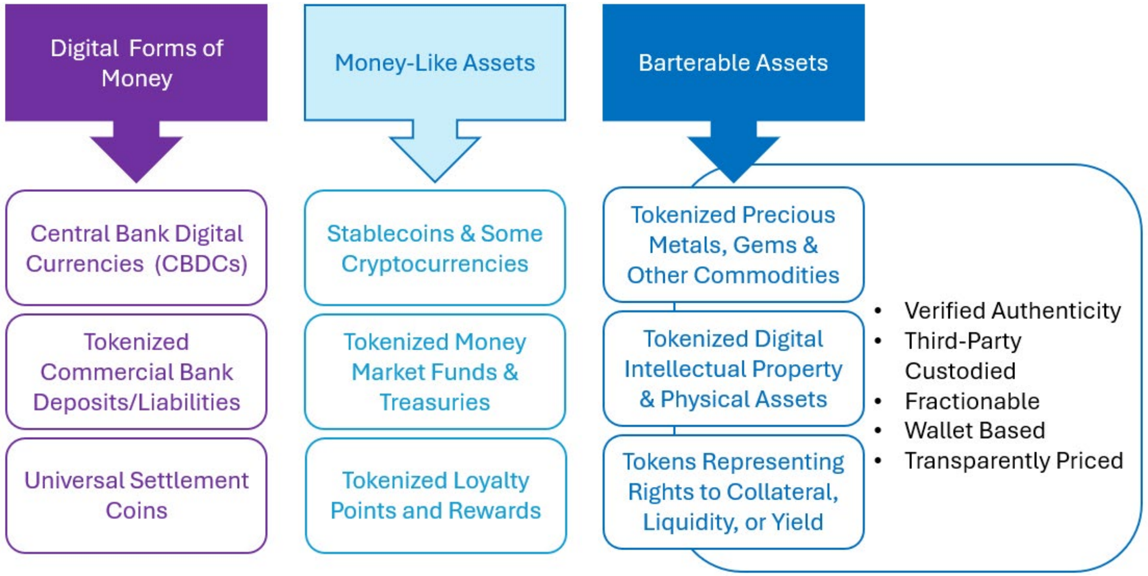
Digitalization and tokenization are extending the forms of fiat currency, allowing for the emergence of money-like assets and making it possible for other types of fractionable assets to authenticated, verified and easily used as instruments of barter

- **Blockchain technologies** are offering a new set of rails for financial transactions that are prompting pilots and experimentation around the globe. Native products such as **stablecoins and cryptocurrencies** are gaining ground
- **Central Bank Digital Currencies** (CBDCs) traction is accelerating
    - Large scale digital pilots in China and Russia
    - The EU's 2-year pilot will conclude in 2025 with recommendations and a timeline for implementation
    - New affiliations and platforms are emerging that have potential to shift the geopolitical calculus such as Project mBridge that includes multiple Asian and Middle Eastern nations, and similar affiliations involving Russia and India
- Tokenized forms of **commercial bank deposits or liabilities** are offering new alternatives to traditional cross-border networks with multi-bank and regulator-sponsored proofs of concept having been completed now in both the US and the UK
- **Tokenized real-world assets (RWAs)**, range from traditional financial instruments such as money market funds or gold, to completely new types of assets like tokenized IP. Their transparency could extend their utility to be used as a forms of payment or barter in lieu of traditional money

Expanding forms of "Digital" Money



Recent CBDC and Stablecoin milestones

- As of 2024, there are **134 countries** (collectively representing 98% of global GDP) **exploring CBDCs including 19 of the G20 nations—11 of which are running pilots**[1]
- **China's digital yuan (e-CNY)** boasts over **260 million unique wallets** and has been tested in nearly **30 cities**. The first ever international crude oil trade to be settled in e-CNY took place in October 2023[2]
- As of Q3 2024, **total stablecoin marketcap is ~$170 billion[3]**. Some estimates indicate that **30% of global remittances** are facilitated through stablecoins[4]

Please see Footnotes and Sources for more information.

The Wider Significance of Money Becoming a "New" Asset Class

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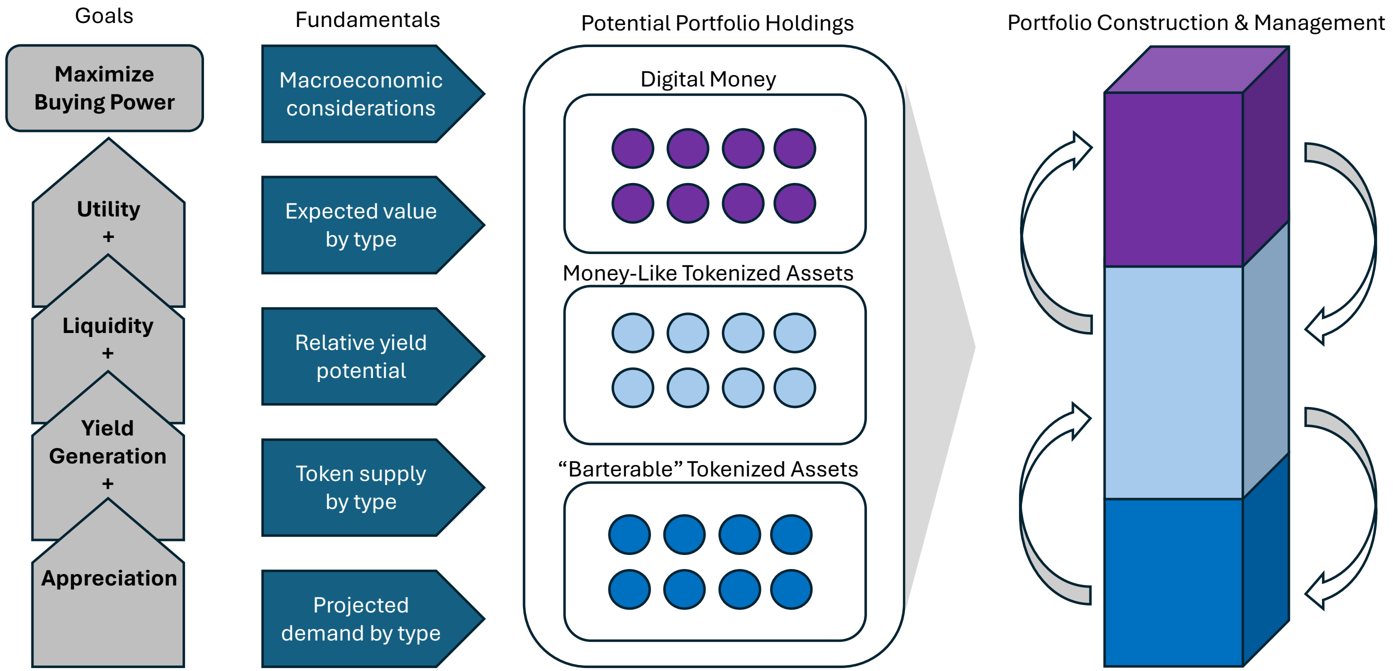
The growing variety in the forms of money, money-like, and barterable assets makes it possible to approach money as an investible asset class that can facilitate portfolio construction and achieve a return of maximizing an investor's buying power

Managing "Money" as an Asset Class

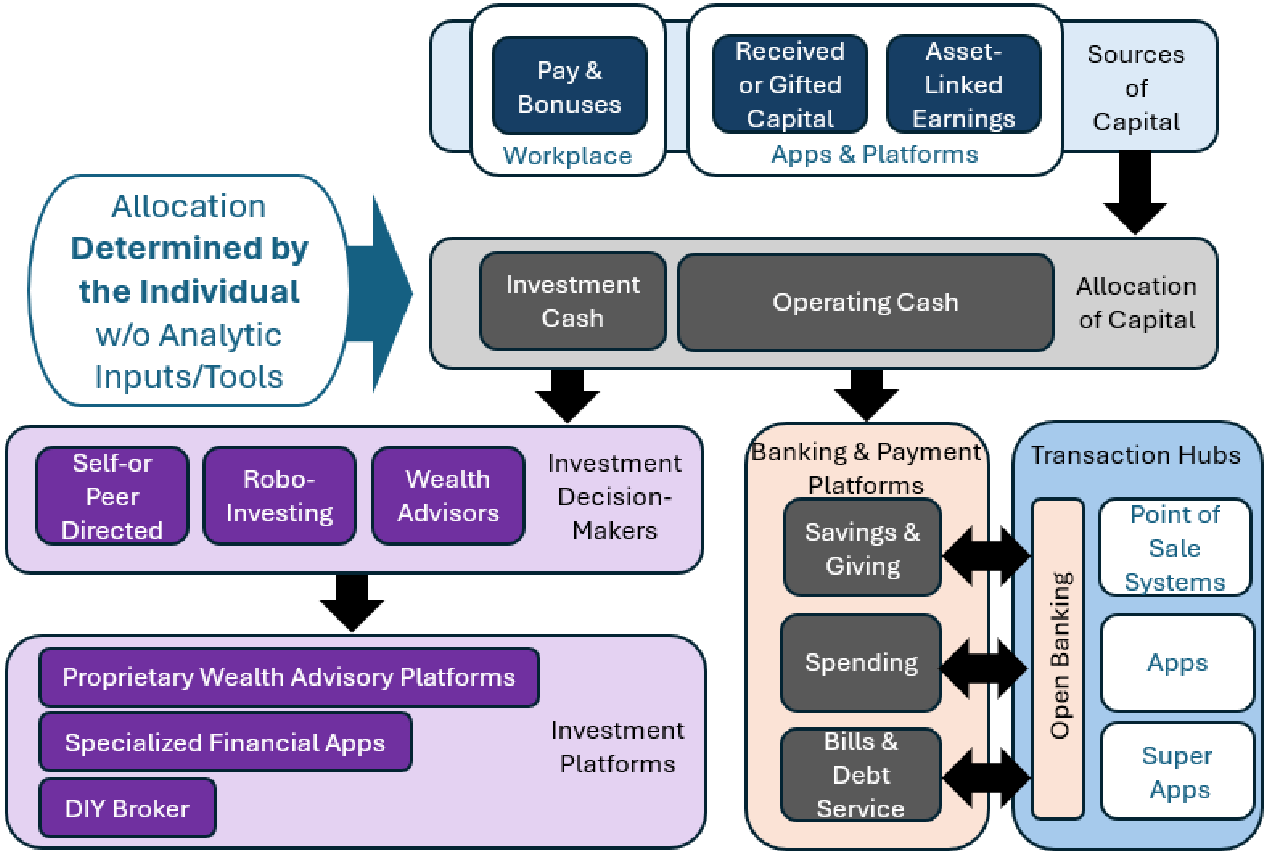


- Today, there is a **limited set of assets** that are considered by professional investment managers for portfolio construction with the primary determinants being their ability **to generate income or appreciate**
- Identifying those with relatively more or less potential to achieve these aims defines active management and systematically obtaining exposure to a diverse set of these instruments defines passive management
- As the forms of "money" multiply, they begin to offer a **third potential portfolio focus—the ability to maximize the investor's buying power**
- This entails **identifying the most effective forms in which to hold money** and balancing the money, money-like, and barterable assets' ability to **appreciate, generate yield**, ensure **liquidity** and provide **utility** to be used for payments or purchases
- Because each of the money, money-like and barterable **assets are being held in a cryptographically protected wallet and are being tracked on blockchains**, it is possible to
  - Confirm the existence and value of each asset
  - Use smart contracts to administer rights around the asset
  - Easily move each type of asset with low operational friction

Chart source: Franklin Templeton Industry Advisory Services.

Today's Fragmented Approach to Capital Allocation

Capital allocation decisions are generally unassisted and/or without adequate tools and technology. Any portion of income earmarked for investment purposes is separated from the individual's daily financial activities and managed separately.



Advice is focused on the pool of capital earmarked for investment

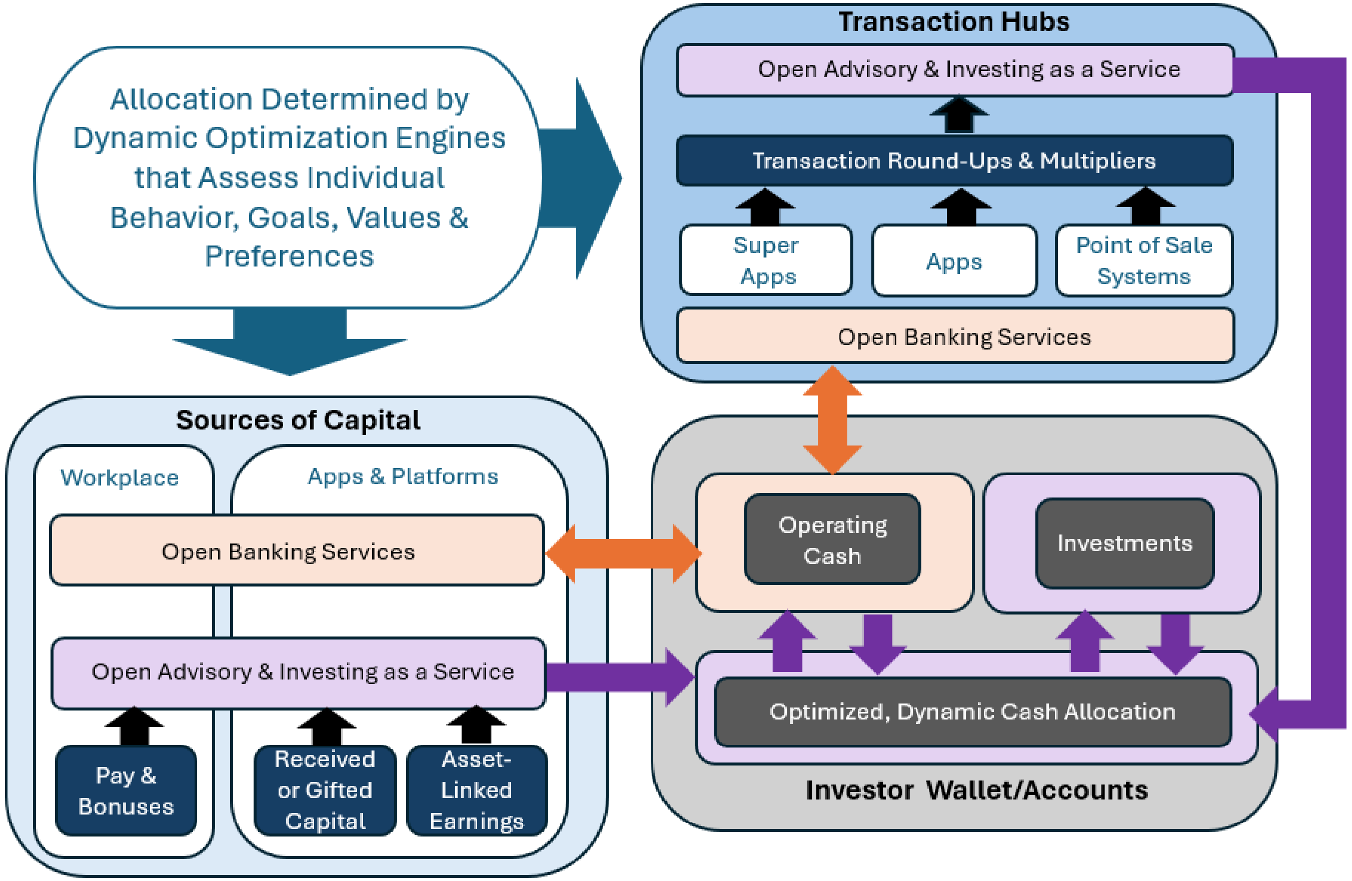
- The capital allocation journey begins **with an individual's separation of operating and investment capital**.
- In the traditional model, these two pools remain distinct, and **reallocation between the two is a manual process**
- While the open banking model allows for certain financial services to be offered to clients outside of their traditional venues (as well as throughout daily life), **this has not yet been applied to investment assets**
- The segregation of capital allocated to investment (advised or unadvised) from the investor's operating cash **restricts the focus of both pools and results in separate consideration and management of the stock of capital and the flow of capital.** This precludes the advisor from offering advice or providing additional services on the operating pool of capital or considering them together.

Chart source: Franklin Templeton Industry Advisory Services.

Upstream Capital Competition and Embedded Advice

In addition to competing to advise capital allocated to investment, managers will compete to move upstream in the flow of capital and influence its allocation to different purposes. Embedding and contextualizing advice on capital flows will parallel the evolution of open banking, and break down the division between their traditionally separate sets of services

The Shift to Embedded Services



"Open Advisory": Advice throughout the capital journey

- By utilizing APIs to import/export services to/from proprietary platforms, **advisory could be offered throughout an investor's financial life wherever and whenever the potential need arises**
- **The scope of the systematic provision of advice will expand to venues largely untouched** by managers and advisors, such as new sources of capital beyond the workplace and transaction hubs like point-of-sale systems
- Although these venues are at opposite end of the capital journey, they both become **crucial inputs to a dynamic capital allocation process,** generating rich and *longitudinal* data sets
- Dynamic cash allocation is part of the **more holistic view and management of the person life, not just their portfolio investments**, enabling a much wider range of value creation and extraction opportunities over a longer time horizon.
- By removing the traditional segregation between pools of capital, open advisory **moves the focus of the advisor to managing both the stock *and* the flow of capital**, and competing to control it upstream in the decision process ahead of competitors.

Chart source: Franklin Templeton Industry Advisory Services.

“Open Advisory” and the Decentralization of Advice

The *money* going to the advice → the *advice* going to the *money*.

Lessons from open banking:

- Open banking, enabled by the use of application programming interfaces (APIs) has fostered a complete change in the way that financial data, products and services are utilized and how they incorporate third party offerings
  - **Embedding bank offerings into third parties**
    - Open banking is shifting _*where*_ services are provided
    - Instead of making individuals interact with their proprietary platforms, banks are exporting their capabilities and embedding banking functions into third party offerings to distribute the provision of services
  - **Integrating third parties into bank platforms**
    - Open banking is also allowing banks to rethink _*how*_ they provide value
    - Market leaders are recruiting networks of third-party providers to facilitate direct access for their customers to partner products, services, and rewards

Opportunity for “open advisory”

- Today **both relationship-driven and self-directed wealth platforms offer similar functionality**
  - Profiling tools, portfolio construction algorithms, model portfolios, research and market commentary, market data and news, investment reporting and peer analysis
- A shift in approach may enable a more differentiated experience and opportunity for enhanced customer acquisition and retention:
  - **Low-touch wealth activities “as a service”**: wealth activities would be distributed and offered “as-a-service”, utilizing open banking services in third party platforms to enable a broader lens on the entirety of an investor’s wealth
  - **High-touch communal engagement model**: goal of deepening the advisor-client relationship by becoming more interactive, expansive, and community-based, creating exclusive networks that incorporate third-party providers and designing new services to foster a wealth “lifestyle”

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Moving to a Co-Mingled, Unified, not Virtual, Portfolio of Assets

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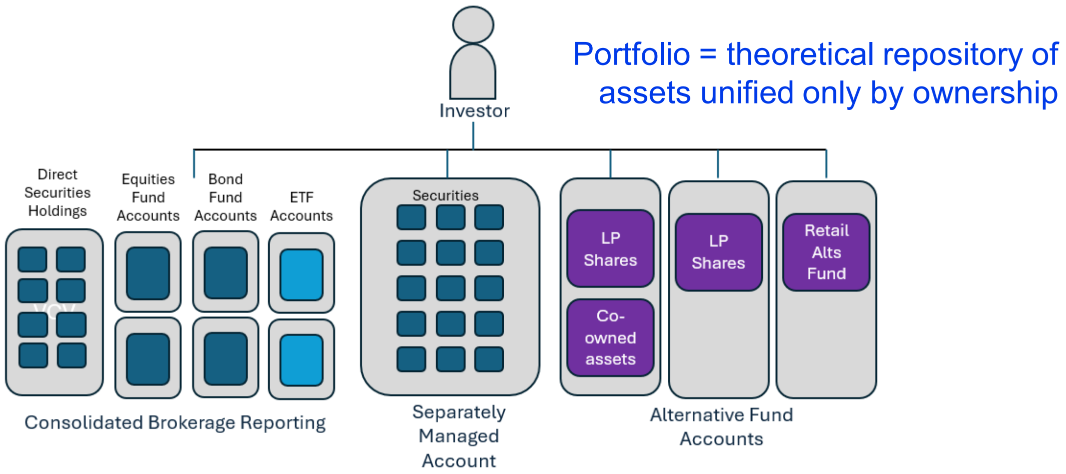
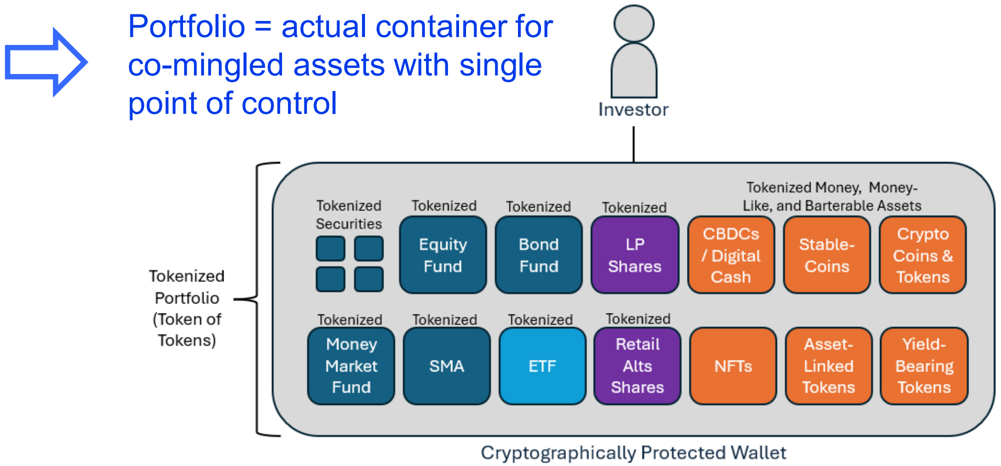
Today's complex account structures mean that an investor's "portfolio" is a theoretical construct used for reporting and analysis—tokenization co-mingles assets in an actual container allowing for enhancements and new opportunities

Portfolio Comprised of Multiple Accounts



Future Wallet-Based Portfolio



- Many investors have **multiple accounts for securities and fund holdings** as each organization that manages their capital must maintain its own records, even if the investor is holding the same exposure at different firms
- **Increased use of separately managed accounts** and the **lack of any standardization in alternative fund processing** adds to the fragmentation
- This means that **a "portfolio" is the set of accounts that belong to one investor**, not an actual construct. As such, it is **hard to get a single view** of the investor's holdings, **difficult to optimize assets** against one another, and challenging to choose the best options for collateral postings or lending

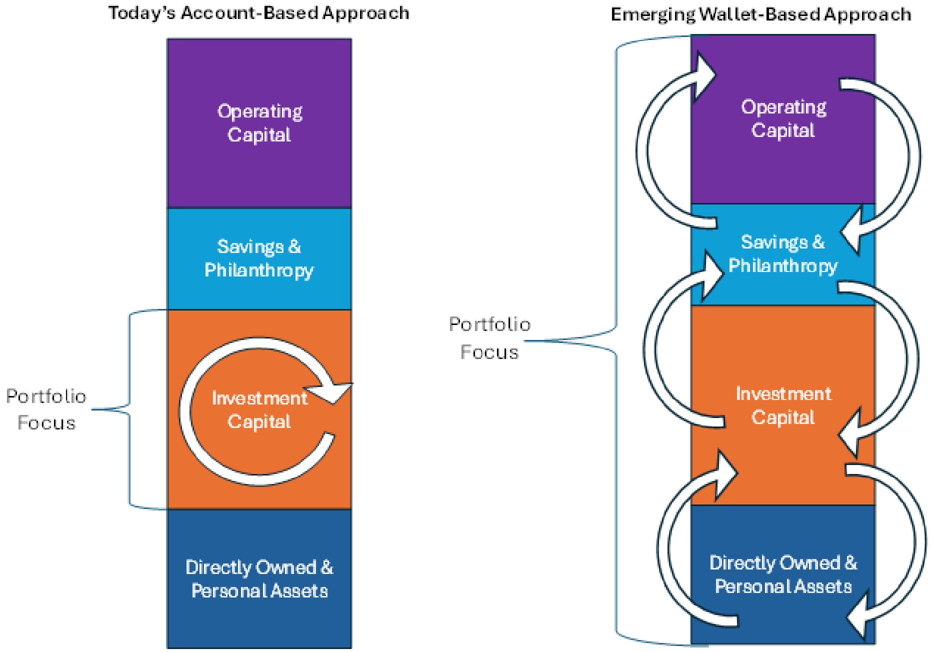
- Cryptographically protected **wallets are software containers** where **tokenized traditional assets and digitally native offerings are co-mingled** allowing for significant enhancements:
  - **Proportional yield & payments:** Ownership can be established at block intervals and paid out multiple times daily or on demand in real-time
  - **Fractional bond & mutual fund shares:** Any fungible tokenized instrument can be fractionalized down to tiny increments
  - **Continuous NAV:** Real-time views of ownership and transactions should allow for NAV calculations at more frequent intervals or on demand
  - **Expanded payment options:** Transparency of holdings, ready valuation & frictionless transfer could enable any wallet asset to be used as barter
  - **New income opportunities:** Investors can use assets, including their own assets, for borrowing, lending, market-making, and sharing

Chart source: Franklin Templeton Industry Advisory Services.

Expansion of Focus to the Entire Wallet

Comingling all assets in the same wallet expands the portfolio focus from solely considering capital tagged for investment purposes to a broader consideration of what it means to manage the entirety of an investor’s wealth or firm’s balance sheet

Expanded Portfolio Focus with Transition to Wallets



Intangible & Real Asset Milestones

- Value of intangible assets for S&P 500 companies was $21 trillion in 2023[1]
- Tokenization of luxury cars is projected to reach $10 billion by 2025[2]
- Owner of the 1708 Empress Catarina Stradivarius violin minted an NFT granting ownership rights to the instrument and posted it as collateral for a loan, putting the actual violin into third-party custody[3]

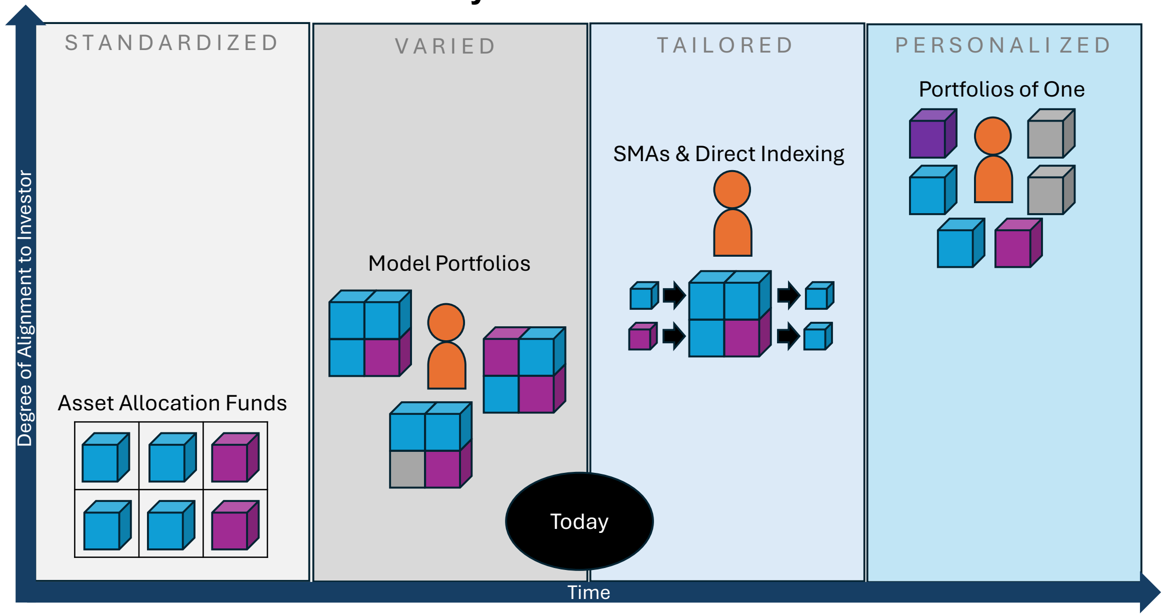
- **Aggregating an investor’s entire range of wealth assets is nearly impossible** in today’s world. The required information is spread across workplace platforms, banks, credit card providers, trust and insurance companies, merchants, apps, super apps and more. Assets are stored electronically, self-custodied, held in vaults, custodied by third parties, spread across properties and jurisdictions
- **Translating the range of these assets into tokenized form** and storing them in a cryptographically protected wallet **flips the calculus on the problem**—instead of the investor cobbling together a view of their assets , the various **providers would instead be directing their assets to the investor’s wallet**
- This would enable **all the various categories of an investor’s wealth** – operating capital, savings, investment capital, and directly owned and personal assets—to be **considered by managers looking to meet investor’s goals**
- This would expand the options for both the investor and professional manager:
  - **Maximized buying power:** Capital allocations and portfolio holdings could be optimized across operating expenses, savings, philanthropy, and investing
  - **Improved liquidity and fees**: All or part of an investor’s directly owned or personal assets could be tokenized and levered by an investment manager to unlock value (e.g., equity built in a home, art collection, personal IP)
  - **Extended borrowing**: Non-fungible tokens could be minted to prove ownership of an asset, and that NFT used as collateral (e.g., vintage cars, watches)
  - **New types of asset sharing**: New types of assets could be shared in decentralized models to provide novel ways to earn income (e.g., Helium pays investors for sharing their router capacity to create a decentralized network)

Please see Footnotes and Sources for more information.

Portfolio Alignment and Moving Towards Portfolios of One

New investment products better align an investor's portfolio to their unique circumstances, but managing an investor's total wealth would require broader consideration of the individual's lifestyle, actively balancing their short and long-term goals

Delivery of Investment Portfolios



Model Portfolio, Direct Indexing & SMA Milestones

- Assets in model portfolios reached $5.1 trillion at the end of 2023 and are seen growing to $11.3 trillion by the end of 2028[1]
- Assets in direct indexing products reached $535 billion at the end of Q3 2023 and are expected to reach $800 billion by 2026[2]
- AUM in retail SMAs projected to reach $3.6 trillion in 2026 vs. $1.4 trillion in 2018[3]

Dynamic portfolio management techniques and products are becoming increasingly important

From generic to individually-aligned portfolios

- Model portfolios **deliver a range of outcomes for different risk tolerances.** Such offerings allow for **better investor alignment** as there are **more variables** that can be used to select the right model for each client. Models designed specifically for a network's own advisors are gaining ground with Cerulli estimating that 30% of model portfolio AUM is now allocated to custom offerings.[4]
- In the US, more deliberate tailoring of portfolios is also taking hold:
  - Direct indexing **enhances the portfolio's alignment** by purchasing a representative set of securities that make up the index and then managing each holding to **lower any capital gains tax exposure**
  - Falling thresholds for separately managed accounts (SMAs) allow an even more targeted approach as the actual **holdings can be adjusted to reduce investor concentration risks and/or reflect certain investor preferences** as well as manage tax implications

Better living through investing

- Tailoring the portfolio works well when using standard investment products, but **as the assets that make up the portfolio expand** to incorporate operating cash, savings, and directly owned assets, **new thinking is needed as each investor must be considered as having a "portfolio of one" to optimize**
- The mandate for such a portfolio of one requires the manager to address both long-term as well as **short-term goals and risk tolerance**
- Short-term portfolio benchmarks quantify what it means to **maximize an investor's buying power** as this improves how the individual lives day-to-day

Please see Footnotes and Sources for more information.

The Portfolio of the Future will Redefine the Role of the Advisor

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Technology is enabling the physical reality of the portfolio to catch up with the theoretical construct of today's portfolios and enabling the creation of new utility streams which can be allied to or separate from familiar financial return flows from the asset.

With all a client's assets held and administered in one place, and ultimately in the same place as money flows, the scope for advisors to add value will multiply, but will require much deeper and more dynamic knowledge of the client

- **"The" portfolio today** is united only by its ownership, not where or how its constituent assets are held, controlled, administered, or viewed. It contains only assets that yield financial return, and which are passively held while waiting for revaluation or to generate income.
- The movement from fragmented control and oversight to a unified view of assets and a single point of control will enable advice to be offered across the **client's full financial picture** rather than on just a segment of the client's wealth.
- Advisors will need to **advise on and orchestrate services for a much wider range of assets**, and help the client **actively maximize their asset ownership** in the face of an ever-changing set of personal parameters. Harnessing AI and creating a network of partnerships will become an increasingly important **competitive edge**.

The portfolio of the future will generate multiple forms of return with specific relevance to the individual and over multiple time horizons

- The ability to generate **new forms of utility** from new assets and the availability of **new ways to extract value from existing assets** will **change the role of the portfolio and the assets in it**. The portfolio will move from being relevant only to a future period of life to additionally being central to daily living.
- Portfolio construction considerations will broaden from exclusively financial return to incorporating **real-world benefits/rewards** and new forms of individual utility.
- **Portfolio alignment** will move beyond financial objectives to encompass and reflect the interests, values and views of the individual, not just their future financial needs and building of a future savings pot.

The range of assets in a portfolio will expand beyond today's combination of active and passive public holdings

- The emerging generation of **new digital alternatives** together with new ways to access **new sources of value generation** outside traditional capital creation and allocation channels is rapidly expanding the potential and complexity of the portfolio.
- **Competition to traditional asset allocation advice** will emerge in the form of automated administration, friction reduction, and choice support/simplification, as well as assistance with optimizing spending and capital allocation across the individual's life, not just within their investment portfolio
- **Robo 3.0** will be a less a product-centred distribution mechanism as an individually-centred orchestration mechanism

The Expanding Scope of Wealth Management

What "wealth" means, the role, scope, and delivery of "advice", and who (and what) is trusted to deliver it, may look very different from today.

The Expanding Role of Advisory

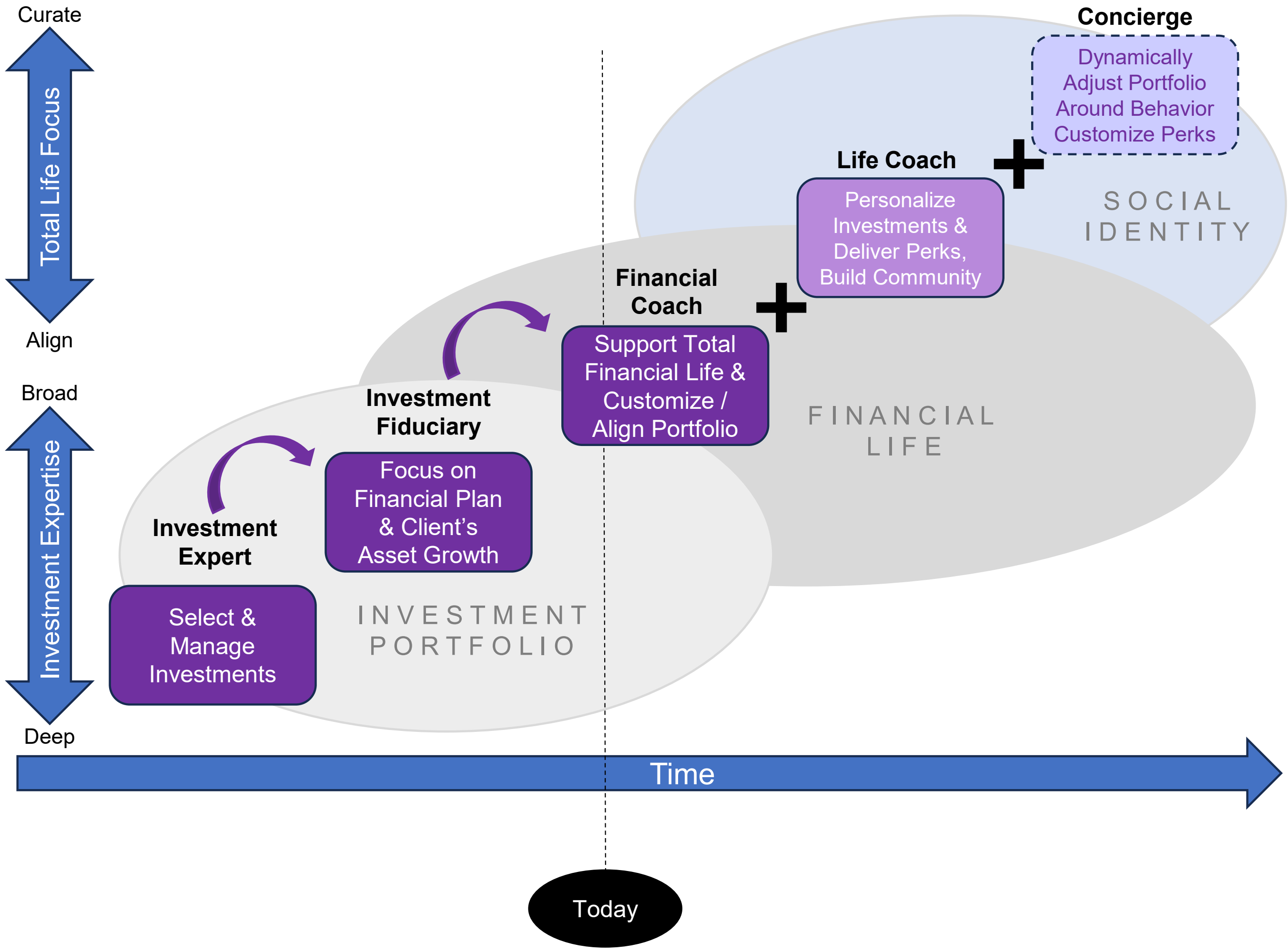

Chart source: Franklin Templeton Industry Advisory Services.

Expanding Mandate for Wealth Managers

- Advisors will need to think more holistically about their client's entire life, not just their financial life.
- Understanding clients' groups, communities, and interests and how the portfolio can be relevant to those may become an important differentiator alongside attainment of financial goals, and the journey may become as important as the destination in certain regards.
- Managers may be required to extend their mandate in 4 ways:
  1. *More Assets*: The range of assets that clients may demand for their portfolio could extend well beyond today's traditional list. Accessing these assets directly or via partners may become a key demand of wealth advisors from investment management partners.
  2. *More Utility*: Investments may need to provide utility beyond value appreciation, e.g., wealth managers may need to offer and link benefits, perks, and rewards to specific investments to attract, retain and provide additional value to customers
  3. *More Personal Relevance*: Wealth managers will need to move beyond cohort analysis to hyper-personalized profiling of customers to understand how to build the most optimal portfolio—this is where AI may become a critical tool
  4. *More Leveraging of Client Assets*: Understanding, unlocking, and monetizing trapped liquidity in their investor's assets by working with investment managers to structure and issue assets may become a key service requirement

Summary: the Future of Advisory

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Participants anticipate an expansion in the *scope* of advice, *where* it is delivered, and *how* it is delivered, challenging current platforms and redefining the future axes of competitiveness

Demographic pressures challenging the traditional "one-size fits all" platform model

- **Today's wealth industry's offerings are accumulation-focused**, but the path-dependency, variability and personal nature of needs in decumulation presents challenges that today's products and platforms are ill-equipped to service
- **New types of assets and different needs and expectations** of next gen investors of assets, portfolios, and advice are impacting the future competitiveness of today's delivery platforms
- With increasing service needs, different delivery requirements, and diverging attitudes towards wealth and investing between younger and older investors**, wealth managers may come under increasing pressure to make a choice between which direction or part of the future they build towards.**
- Doing nothing has severe limitations as a strategy as even **being competitive in the generational wealth transfer market** will require immediate and significant work to bridge the two models.

Advice will be offered across different venues and its scope will expand to new assets and their respective utility

- The migration of the API-enabled model of open banking to wealth management will enable the **simultaneous fractionalization of advice** (smaller minimum viable unit) **and expansion of advice** (advising on different forms of capital flow, not just allocation of the stock of investment capital).
- Advice provision will be embedded into the capital journey and across various points in the client's life, influencing and servicing the flow of money into and through an individual's life. **Instead of the money going to the advice, the advice will go to the money.**
- Convergence of the infrastructure used for money/payments and for assets will accelerate the **breakdown of the current distinction between banking and wealth management.** Complexes with multi-point client relationships may have a potential head-start in building a **network of relevance** to the client.

Redefinition of competition and the bar-belling of wealth delivery models

- **Bar-belling of high and low touch models.** High-touch models will be driven to deepen the advisor-client relationship through an individually tailored set of forms and venues of engagement, while low-touch, tech-driven engagement solutions will focus on improving a client's daily life through the generation and personalization of greater utility and rewards from a portfolio.
- **Portfolio alignment and relevance.** Competing to provide appropriate transaction-sized advice/guidance at point of need for any money flow (rather than just for left-over capital ear-marked for investment) and focusing on providing utility through putting the individual at the centre of a personalized network of services, information, and emotion-driven engagement tools, will drive differentiation beyond traditional index outperformance return metrics.
- **Network alpha.** At both ends of the barbell, wealth firms will need to develop a network of strong partnerships and relationships with (often non-financial firms) who can offer relevant benefits/rewards to clients, or partners who have an existing network that wealth firms can plug into and enhance.

Final Words… and Continuing the Conversation

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“Our ability to adapt is amazing. Our ability to change isn’t quite as spectacular”

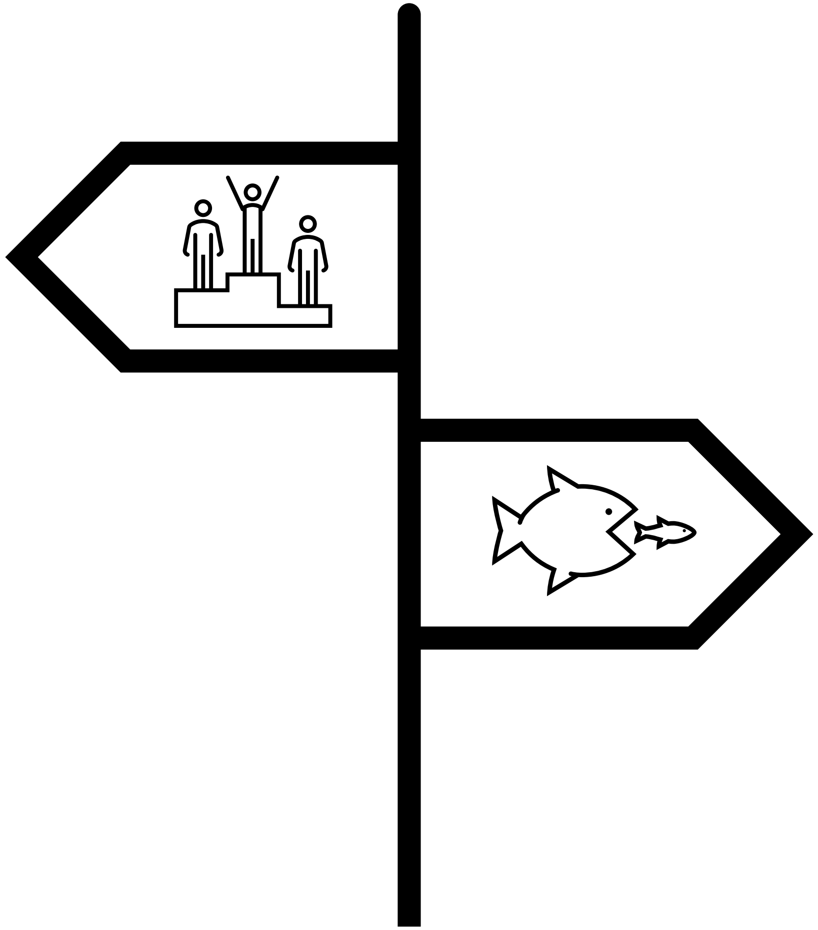
Tim Harford

“Change before you have to”

Jack Welch

“You don’t have to change. Survival is not mandatory”

W Edwards Deming



Appendix 1:

The Future of Platforms and Robo 1.0 → 2.0 → 3.0

Advisory Platforms Enabling More Client-Centric Delivery…

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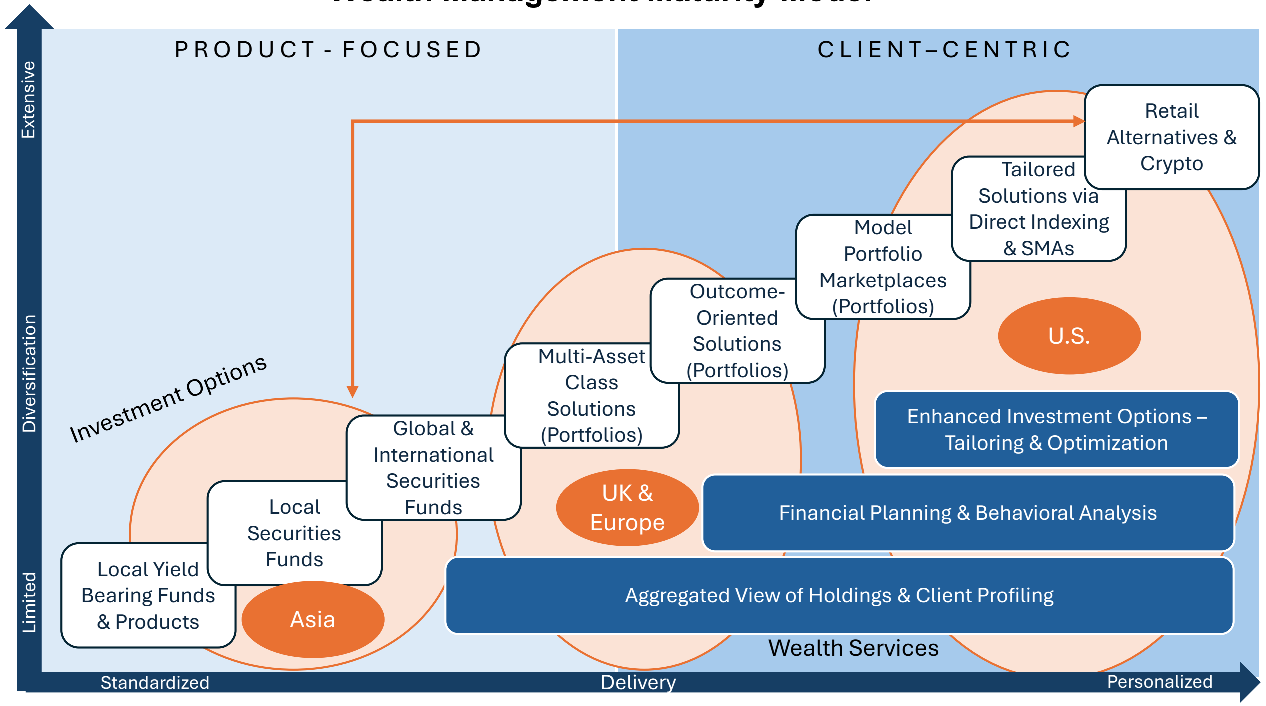
Regulatory pressures are driving advisory to be more client-centric—a pursuit that is making the industry increasingly reliant on tech-driven platforms and on the tools and analytics that can help inform cohort behaviors

Wealth Management Maturity Model



Direction of travel

- The economics and approach to delivering wealth advice are becoming **more client-centric, regulated and transparent**
- Remuneration models are coming under pressure and there is a growing demand to demonstrate that bankers or advisors are **acting in a client's best interests**. To deliver on this mandate, the tech platform is becoming ever more critical

Capabilities required to delver a client-centric platform

- **Understand client journeys and peer set**: Enhanced profiling is required to understand a client's values, goals, and preferences as well as their wealth picture and risk tolerance. Profiling a client's life journey, comparing them to others in a similar cohort and modeling peer behaviors enables an intelligence-driven approach
- **Standardize how advisory is delivered**: Delivering a common set of financial planning tools, investment options, and content allows wealth organizations to better track the provision of advice and met the regulatory standard of acting in the client's best interests
- **Upgrade the portfolio offerings**: The type of investment products being delivered via the platform should evolve to enable closer alignment to a client's needs and circumstances and provide enhanced diversification though the delivery of these goals is uneven across regions
- **Improve the digital and omnichannel experience**: Mobile offerings and websites need to offer the same ease of use and intuitive access to information and services as financial apps and the digital experience should provide the same high-touch experience whether collaborating via a video conference, speaking on the phone, or visiting an office

Chart source: Franklin Templeton Industry Advisory Services.

Current Technology Supports Lifecycle Wealth Approach in the US

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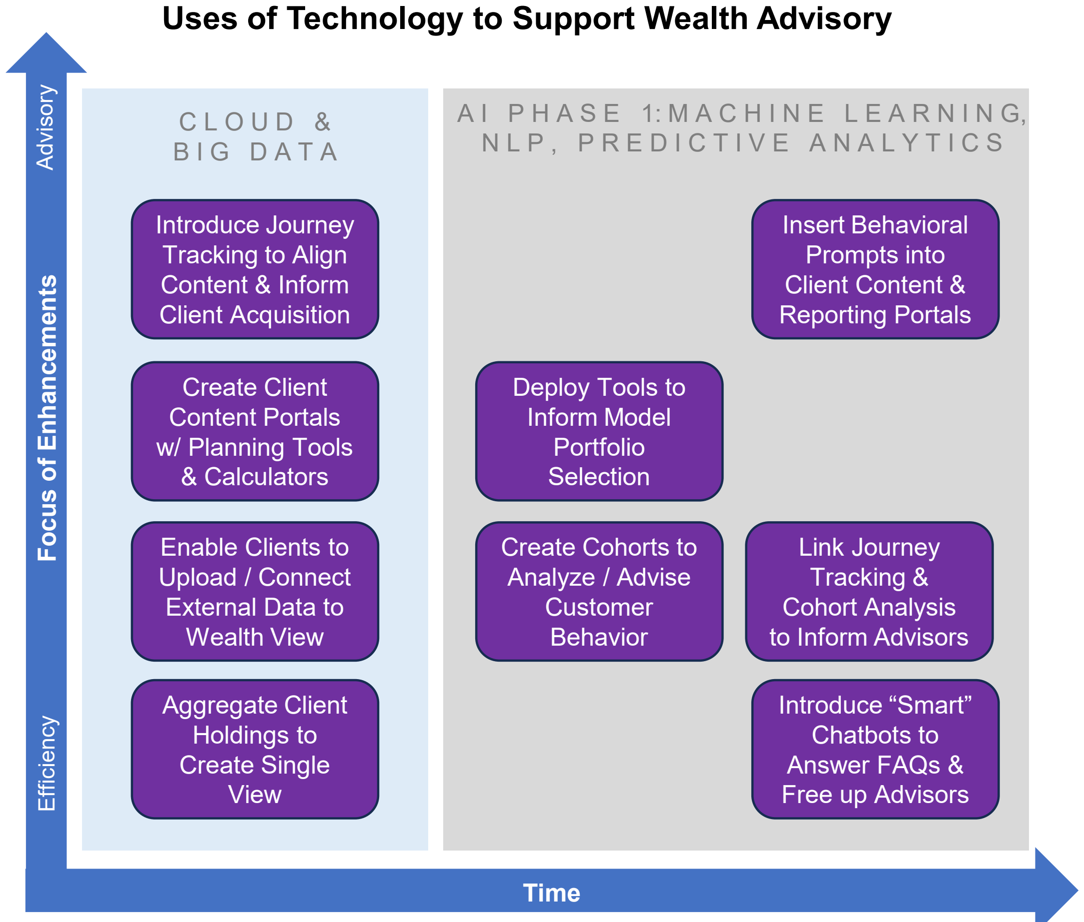
Understanding the client's broader set of financial needs became essential as the advisor's mandate broadened: journey-based tracking tools and cohort analysis became critical inputs to help optimize client engagement



- **New tech-led sales tools facilitated a client-journey approach based on online behavior:** The growth of the internet and mobile seeded new sciences of customer behavior and understanding of how to manage the client journey. Automation of early interactions and monitoring of journey stages helped scale client management and time human involvement.
- **Provision of client portals enriched with tools and content**: Static marketing sites evolved into interactive destinations with life-stage/milestone appropriate educational content, analytics and tools to assist with individual modelling, and contextualized explanations of relevant products/services. The data generated can be fed back into journey tracking.
- **Move from a single account perspective to a more comprehensive life picture:** The focus of understanding broadened from the single advisor account to the total firm relationship towards a comprehensive, integrated picture of wealth held outside the firm, wealth and situation of relevant stakeholders and affiliates, e.g., family, business co-owners, etc. This enabled the movement towards being a life-coach, not just a financial advisor or financial coach.
- **Cohort analysis & advisor workstations**: This led to cohort creation and analysis, grouping clients by common characteristics and analyzing their buying behaviors and response to different messages and approaches. Networking CRM information, cohort insights, account information, and platform interaction data led to advisor workstations.

Chart source: Franklin Templeton Industry Advisory Services.

… but Growing Challenges with One Size Fits All Platform

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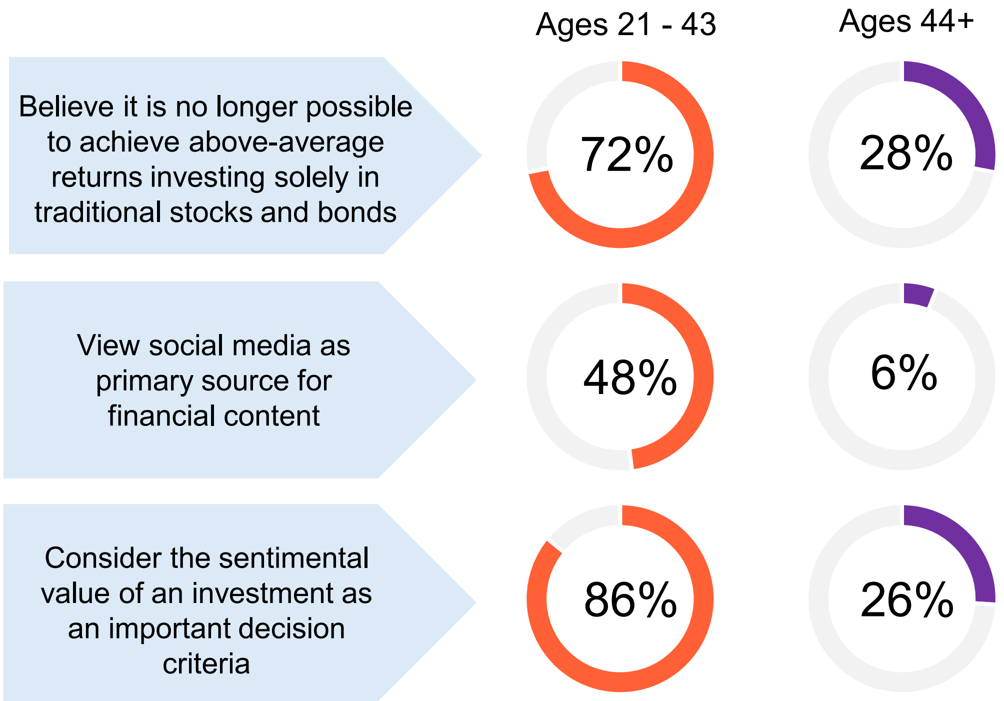
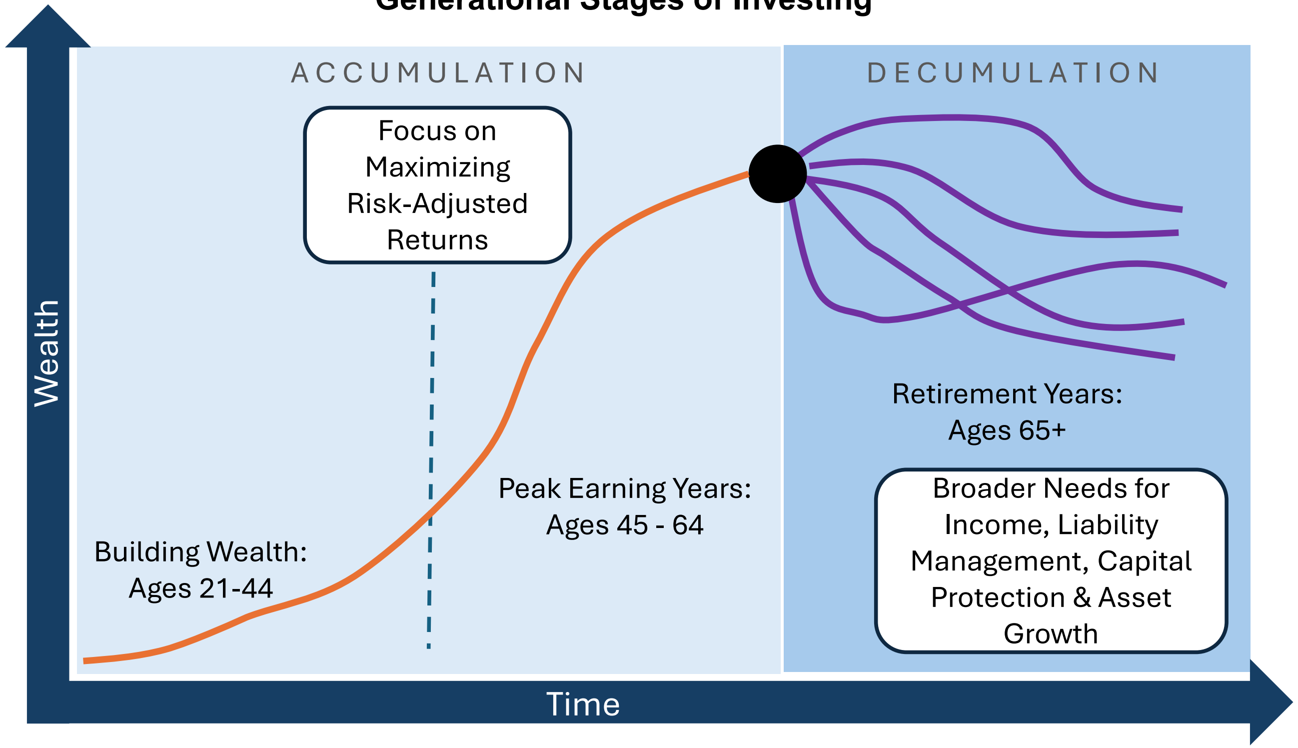
Wealth platforms today pursue asset accumulation, but growing gaps in generational views make a standard delivery of that mandate increasingly difficult and as investment needs change due to the retirement of the baby boomers and early Gen Xers

Generational Views on Investing[1]



Generational Stages of Investing[2]



Shifting Engagement: Millennial and Gen Z individuals are digital natives who embed their **social identity and desire for community engagement** into their communications and activities, including their pursuit of investments

Divergent Views of Investing: Fixed income is ranked 7th and domestic equities 9th in terms of growth opportunities for investors ages 21-43 whereas 93% plan to allocate more to alternatives (versus 28% of those age 44+) with **real estate, crypto/digital assets and private equity their top 3 choices** [1]

Unique Retirement Pathways: Accumulation is a common goal shared by those in their wealth building and peak earning years, but those entering retirement pivot to **decumulation**—a pursuit tied to their **unique circumstances, desires, and behaviors**

Broader Investment Requirements: Financial planning and modeling becomes a far more critical activity for those in or approaching retirement as they must assess how well the **income being generated by their pension and savings pools can cover their expenses** and ensure that those **assets are protected** to last their lifespan

1. Source: "2024 Bank of America Private Bank Study of Wealthy Americans." Bank of America Private Bank. 2024. 2. Franklin Templeton Industry Advisory Services.

The Demographic Timebomb Beneath Today's Wealth Platforms

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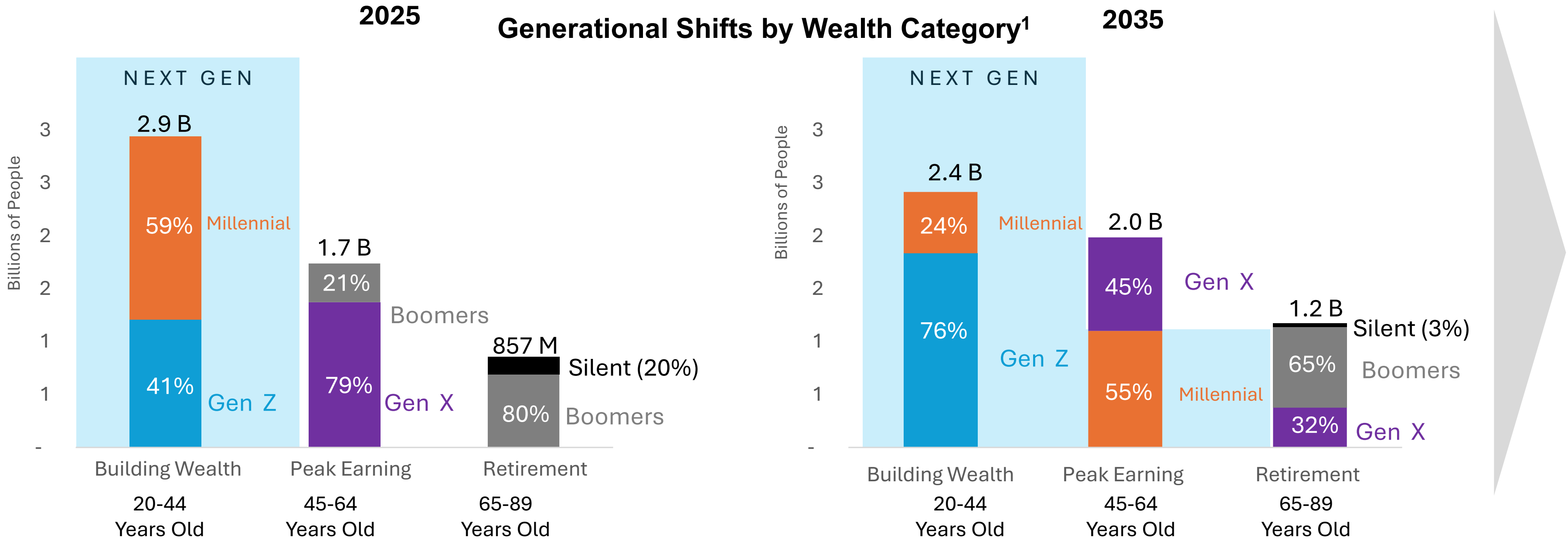
Organizations looking to delivery wealth advisory are facing an "either-or" platform strategy decision – building for the next generation of investors or pivoting their focus to decumulation--since both require new products, services, and ways to engage



Building an accumulation-focused advisory platform based on today's view of wealth requirements is **unlikely to be a sustainable strategy** with the absolute and relative shrinkage of the audience for such an offering shrinking over the next 10 years

Building an accumulation platform for Next Gen investors:

- New **allocation models**, more alternative building blocks **including crypto** and **digital assets**, and **new benchmarks** that quantify social impacts of holdings
- Ability to ingest and **consider investor's own assets** as part of the portfolio
- **New tone** and approach to content including more interactive and short-form
- **More communal**--ability for investor to contribute their own views, include peers, and engage with "influencers"
- Intuitive, easy, fast and **consumer-app level user experience**
- **Wallet-based delivery** that allows for seamless transfers of money and assets and increased focus on "smart" budgeting

Building a decumulation platform for Retirees:

- **New investment products** that embed guaranteed income streams and incorporate hedges to help protect capital
- Modeling tools and analytics to demonstrate portfolio longevity that **incorporate investor's income streams, spending patterns and liabilities**
- Modeling of withdrawals to determine **account sequencing and tax implications**
- Services and strategies to **manage the liquidity** of equity trapped in an individual's real estate and hard assets
- **Facilitation of wealth transfers** and ability to support wind-down periods of **co-investment across generations**

1. Franklin Templeton Industry Advisory Services analysis based on data from "Population of World 2025" Population Pyramid and "Population of World 2035" Population Pyramid. Accessed October 3, 2024.

Expectations for Generative AI in Wealth

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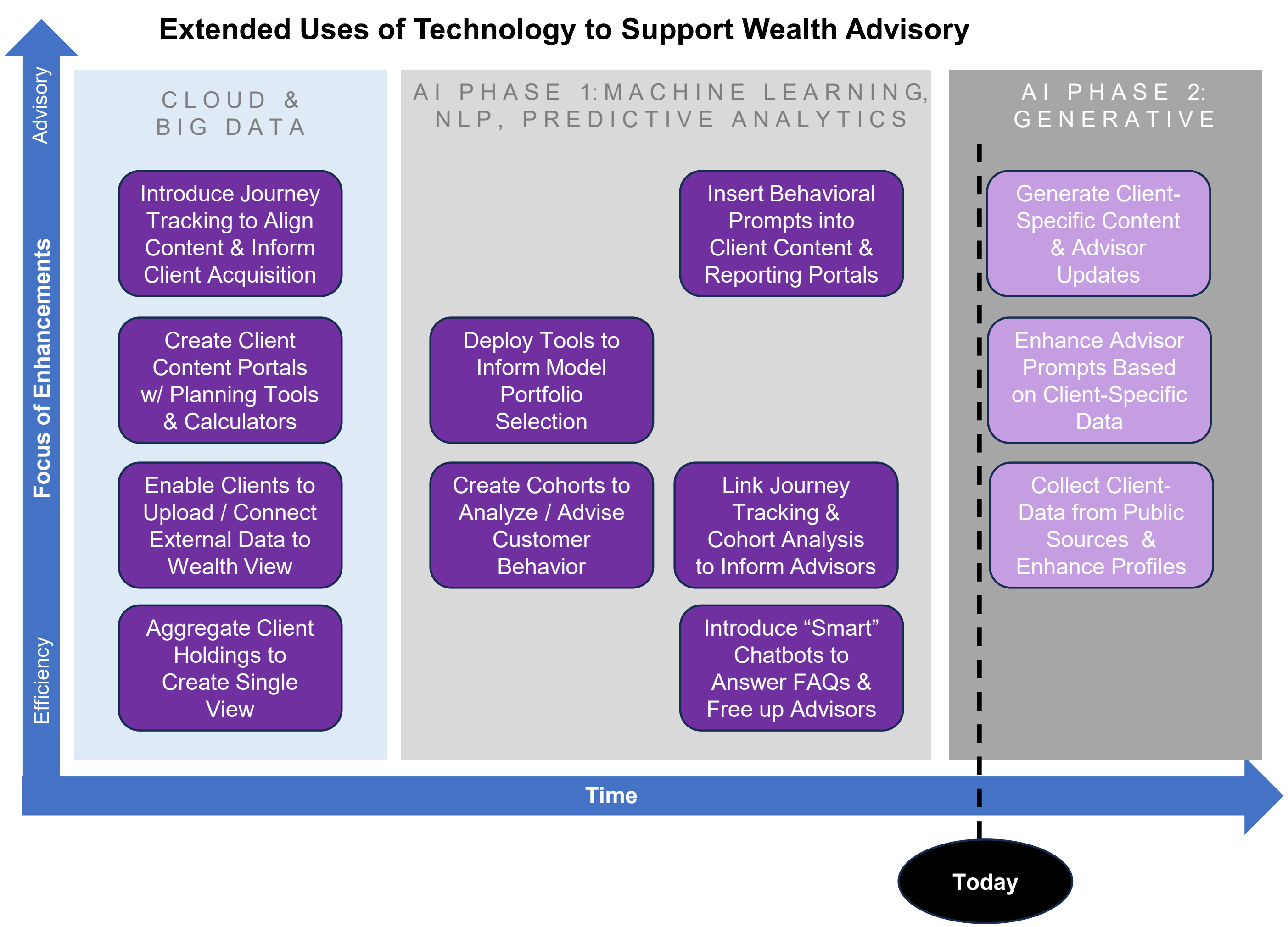
Ideas around how generative AI that can deliver greatly expanded insights and capabilities might be applied to the wealth management industry abounded during our survey interviews—with early applications focused on personalizing client insights



- **AI will help enable the move from the cohort/persona level to the individual level.** By itself, being able to accurately map an individual to a cohort does nothing to make the identified journey more compelling or engaging.
- Survey participants expect generative AI to be the key to personalization at scale, e.g., of content for prospects or existing clients, via richer automated dynamic profiling.

- **Generative AI is seen as key to building a much richer picture of an individual** based on a combination of existing but disparate data and data created through active engagement and interaction.
- The ability of AI to autonomously search, find, and synthesize data from multiple and often unknown sources is expected to be harnessed to generate insights on individuals at scale.

- **Better targeted and more specific advisor prompts** are expected to come from combining these enhanced profiles with insights gleaned from with online interactions can.
- These can equip advisors with client-specific product recommendations and sales strategies, openings to expand their coverage of the client's network, as well as providing nudges to both advisers and their clients.

Chart source: Franklin Templeton Industry Advisory Services.

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AI. Anxiety Inducing or Automatically Indispensible?

A framework for thinking about AI + key questions

"Computers are useless. They can only give you answers."

Pablo Picasso

"Any fool can use a computer. Many do."

Ted Nelson

"The computer was born to solve problems that did not exist before."

Bill Gates

- What it isn't
- Areas of application
- Important misconceptions
- AI and the investment process
- Extracting value from technology and lessons from big data

AI, the Investment Process, and Lessons from Big Data Adoption

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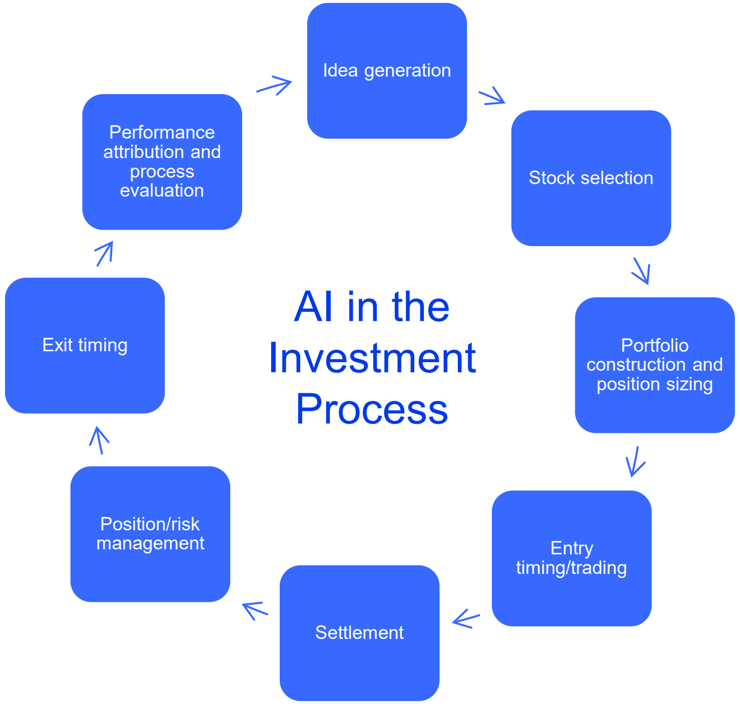
AI is increasing its scope of active control over all stages of the investment process, but the industry's adoption of big data contains many parallels and lessons for us today.

AI is being applied to all stages of the investment process

- Investment is essentially about pattern recognition and understanding connections better than the competition. Tradable connections are becoming more complex, and portfolio construction is becoming more data-driven.
- AI is becoming an increasingly important **complement to the human black box** to enable effective navigation of the investment landscape + construct portfolios



AI and active management

- Current applications (incl hedge funds) and whitespace
- Factor identification and extraction
- Intersection of AI and blockchain

Common AI thinking traps

- Problems with talking about AI
- Framework: the investment process + internal organization and processes + external client interaction
- Structural blindspots and the rate of change

Lessons from integrating big data into the investment process

1. **Generating trust in outputs is key**
   - Mechanisms to generate appropriate confidence levels are key. Responsibility entails explainability
2. **Machines and people are different**
   - They have **different strengths** and **make different errors.** Combining the different abilities of humans and machines and mitigating their different weaknesses is key. The optimal combination is both **dynamic and context dependent.**
3. **Integration requires rewiring**
   - New tools require new workflows, thought processes and mindset. Cultural integration is as important as systems integration and process redesign
4. **Distinguish between alpha and beta**
   - Adoption to not fall *behind* is different from pulling *ahead.* Possession of a tool confers only temporary advantage. Competitive advantage comes from *maintaining inequality* and from accessing the *talent* to use the tools
5. **Data contains many different traps**
   - You need to know what to look out for and how to find it. Firms need to design processes and supervise appropriately

Source: Franklin Templeton Industry Advisory Services.

Expanding Role & Focus of Advisory

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AI advances make it likely that advisors will move upstream and consider an investor's entire financial life as the ability to dynamically model real-time behaviours allows for new services that assess investor's total capital, not just their investments

Evolution of Wealth Advisory

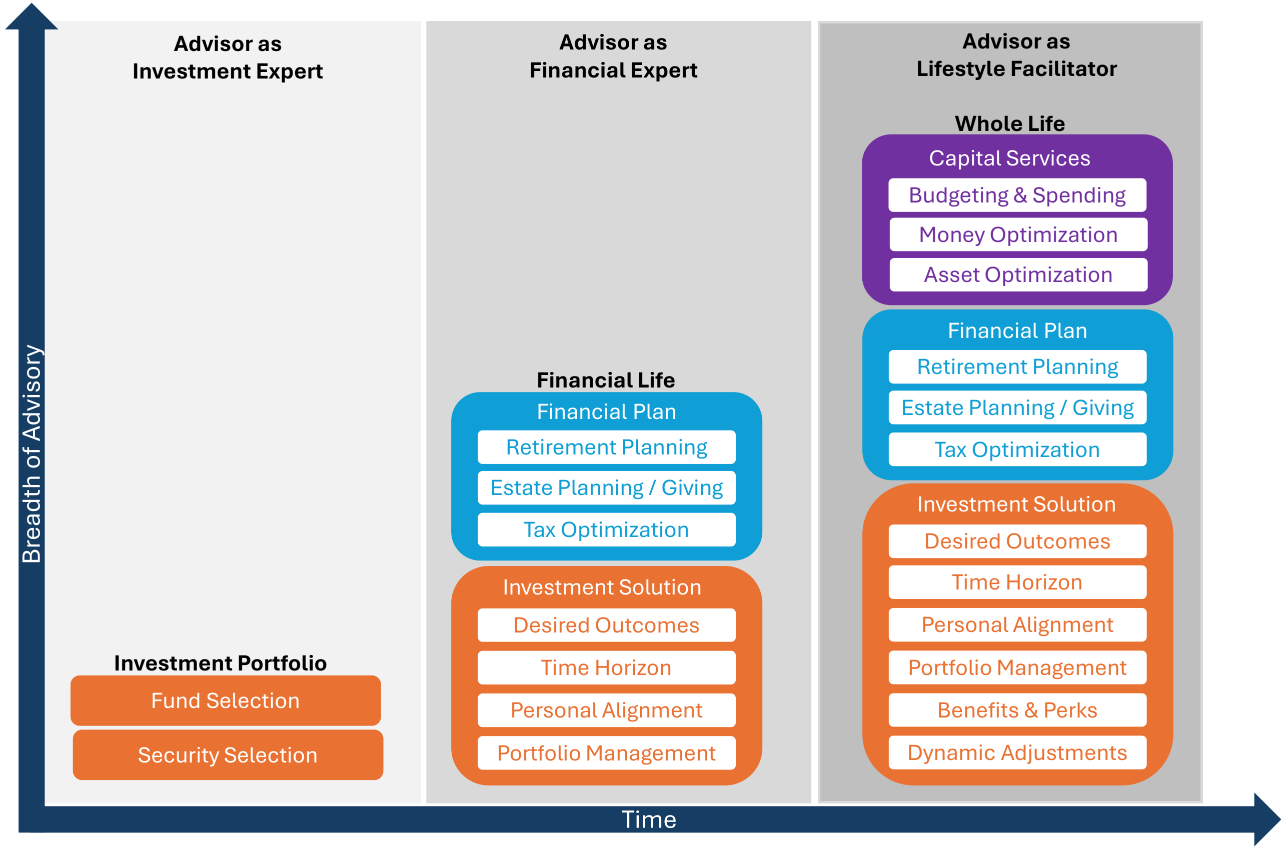


Chart source: Franklin Templeton Industry Advisory Services.

1. Source: "Got Leather? Almost a Third of Consumers Prefer Carrying Physical Wallet." Pymnts. April 3, 2024.

2. Source: Jones, Howie. "Gen Z, Millennials increasingly embrace gig economy." Baseline. July 18, 2024.

Advising about the allocation and use of money and assets

- Rather than waiting to service a client downstream of their capital allocation decisions, wealth providers are likely to shift to **become part of the upstream decision-making about how to deploy capital** as well as how to invest it – bringing banking and wealth advisory closer together
- Using new AI abilities **to ingest and analyze behavioral data** on individual clients—their cash flows, transactions and activities—and **model the resources they own** enables the banker or advisor to **optimize the client's overall wealth creation, not just their investment portfolio**

Growing need for capital services

- Most Millennial (67%) and Gen Z (79%) individuals **rely exclusively on their digital wallets** versus Gen X (44%) and baby boomers (26%).[1] This **creates a strong data trail for AI to assess and model**
- Next Gen individuals are being educated through "loud budgeting" social media campaigns and "finfluencers" to **focus on their day-to-day behaviors** – 69% of Gen Z set a budget vs. only 42% of baby boomers[2]
- The nature of Next Gen work underscores this need—53% of Gen Z and 50% of Millennials have **"gig" work arrangements** even when they have a main source of employment with the goal of creating a better work-life balance—this adds fluctuations and uncertainty into their daily pursuits
- For older cohorts, modeling their day-to-day activities, assessing the **impact of day-to-day activities on their retirement savings**, and helping them to adjust budgets and optimize their use of money and assets will be equally important to **stretch coverage of nest eggs**

Appendix 2:

The Evolution and Future of Industry Infrastructure and its Implications

ETFs and the Pathway to "Real World Asset" Tokenization

We do not anticipate a rapid switchover to a new financial market infrastructure given today's entrenched ecosystem, but instead may see a multi-stage pathway emerge that introduces key enhancements that set the stage for broad tokenization

Digital asset ETFs bring blockchain technologies into the ETF ecosystem

- The launch of spot Bitcoin and Ethereum ETPs in the US, has forced some of the world's largest ETF providers **to onboard crypto-native partners and rely on data from public blockchains** to operate their funds
- Many commodities are already offered in an ETF wrapper and the use of blockchain as a proof of reserves **to verify the inventory and track the ownership** of tokenized goods could see the structure used for **more types of digital assets** (e.g., IP rights)
- As the use of blockchain grows, **blockchain related ETF processes** are likely to be **programmed into smart contracts** to automate key activities (e.g., daily file submissions, in-kind or cash redemptions)

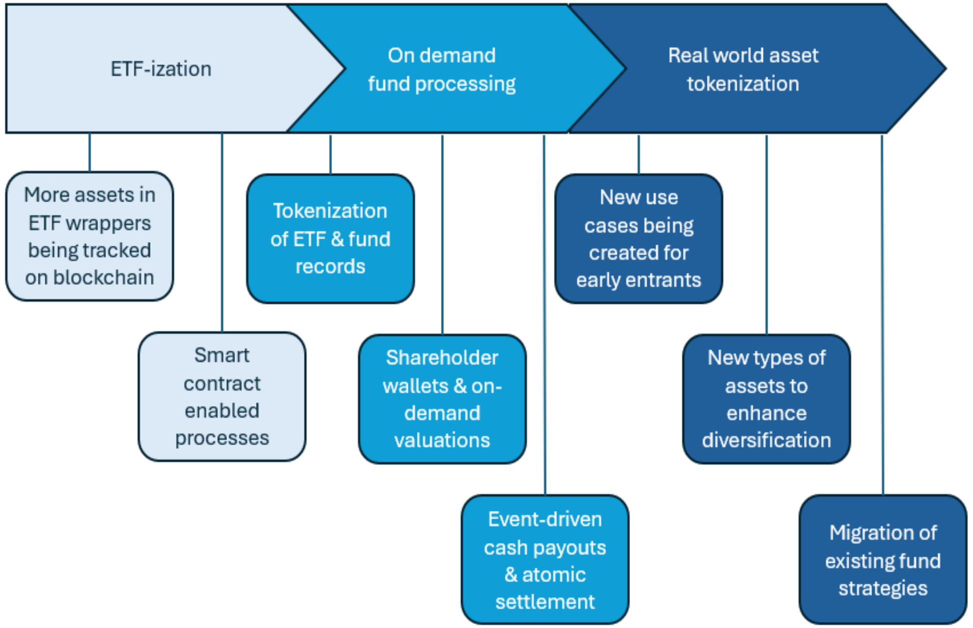
"On Demand" fund processing creates significant operational benefits

- In parallel, efforts to improve the processing of traditional securities funds using tokenization and blockchain are occurring on both private and public chains
- These initiatives introduce a **wallet-based system** for tracking and processing **tokenized fund records** and allowing for first more frequent and eventually **real-time valuation and payments** and eventually **atomic settlement**

Real-world asset tokenization occurs as ecosystem slots into place

- New use cases for tokenized funds are emerging, particularly in the collateral space where **more than $2.0 billion in tokenized money market funds**[1] are being utilized
- Efficiencies gained via smart contracts for ETFs and opportunities enabled by tokenized fund records should encourage **more types of new and investible real-world assets** to be offered in a tokenized form (e.g., cultural assets) and then eventually **the migration of traditional securities and funds**

Envisioned Pathway to New Financial Ecosystem



Two Milestones for ETFs and Tokenization

- **Bitcoin ETPs saw Day 1 inflows of more than $4 billion**. The first gold ETF saw $1.2 billion in inflows in its first *month* of trading.[2]
- The **Global Layer One (GL1) project** from the Monetary Authority of Singapore (MAS) brings together international policymakers and financial institutions to explore the design of an open, digital infrastructure that will host tokenized financial assets.[3]

Please see Footnotes and Sources for more information.

Implications for Assets

The re-architecting and transition to digital infrastructure creates new process and asset possibilities. The shape of the future emerging from the combination of current dynamics has 3 key implication areas for assets.

1. How we *move* assets

Reduced asset transfer friction - increased mobility of collections of securities within and across portfolios

Expanded role of ETFs in moving blocks of securities

Tokenisation as a tool to increase liquidity - expansion of tokenization minority shares, secondaries, co-investment – tokenization enabling transfer of LP shares already happening

Shorter settlement chains freeing up assets currently encumbered as collateral

Moving towards **assets *and* payments** (and liabilities) being on the **same rails/chain**

More efficient infrastructure + processes

2. How we *hold* assets

Single point of control and view – portfolio no longer a theoretical construct with holdings only united by their ownership

Ability to comingle asset types (public, private, traditional and digital) enabling more effective portfolio optimization and administration

Embedded agents and reporting functionality streamlining processes and controls

Use of **smart contracts** to **automate aspects of administration** of assets

Movement from accounts to wallets

3. Form and flexibility of assets

Programmability enabling the engineering of asset properties and their combination

Automatic **administration** of rights and their transfer using smart contracts

Product evolution will morph into portfolio evolution as technology provides more effective, efficient, secure and cost-effective ways to gain, maintain, and modify exposures:

Mutual funds and UCITs → active ETFs → tokenised assets in ETFs → tokenised assets → tokens of tokens = portfolios of one

Tokens being able to function both as an investment and as a wrapper

Assets becoming software

The Changing Future of Investing + its Infrastructure

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The evolution of assets, portfolios, and industry infrastructure has significant implications for investment managers

The emerging financial infrastructure and blockchain-related technology has far-reaching implications

- **How and where assets are held**: siloed, non-interoperable accounts → consolidated wallets containing public and private assets alongside digital alternatives = physical reality of "the portfolio" catches up with the current fiction
- **Settlement:** batch-based → continuous
- **Markets**: trading sessions determined by the sun → trading sessions driven by investor needs and asset characteristics

Technology is playing an increasing role in the business of investing, creating new forms of competitive advantage and replacing outdated value creation processes

- In particular, the role of AI (and blockchain) in
  - The investment process
  - Internal organizational processes
  - External client interaction
    - Generating trust, data, and opportunities
    - New forms of value
    - Active management of relationships

The expansion of what assets are and can do…

- Expanded **range of assets + expanded definition of an asset**
  - What we can gain exposure to, e.g., intangibles (digital and traditional)
  - Digital alternatives + new ways to invest in existing assets
  - Greater range of assets wrapped in ETFs – not just permutations of current financial assets
- Expanded **range of payoffs** generated by those assets
  - Cash flows are not the only form of relevant utility yielded by assets
- Increased **asset functionality**
  - what those assets are able to do, e.g. via programmability
  - expanded set of assets able to be used for payment + management of those choices

… has implications for portfolio management

- **How we construct** and think about portfolios
  - Active management → active ownership and value extraction
  - How we gain exposure - not just buying equities and bonds
  - New ways value is being created in the economy and how it is accessed
- **How we align portfolios** with the providers of capital
  - Use portfolios to generate relevant benefits for stakeholders groups/individuals
  - Monitor, report against, and administer the expanding range of investable assets

Appendix 3:

Sources

Sources

Slide title: Divergent Generational Needs & Views

Chart Source Left: Franklin Templeton Industry Advisory Services.

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Slide title: ETFs and the Pathway to “Real World Asset” Tokenization

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Slide title: Portfolio Alignment and Moving toward Portfolios of One

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