



Keynote II

# How Technology and Regulation will Shape the Future of Financial Advice

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**International Structured Products Forum – Uniting the Industry's Finest**



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Lucerne

International Structured Products Forum 2024  
Lucerne - September 3, 2024

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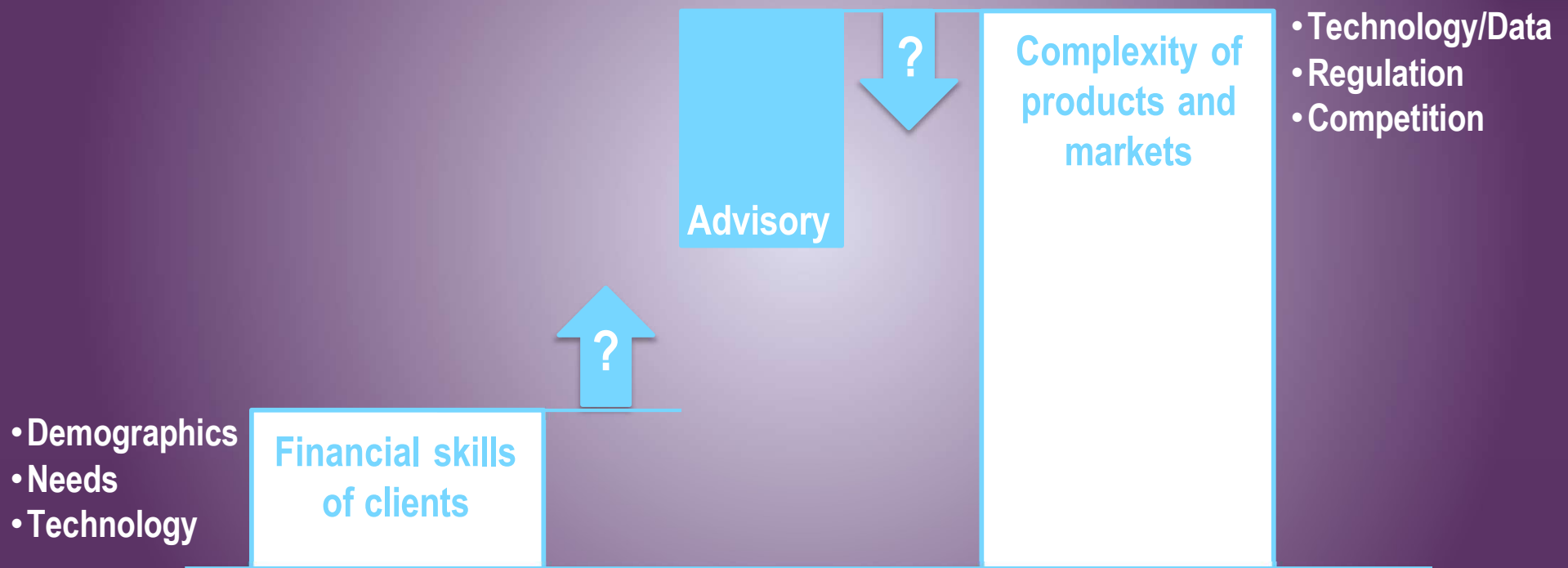


# How Technology and Regulation will Shape the Future of Financial Advice

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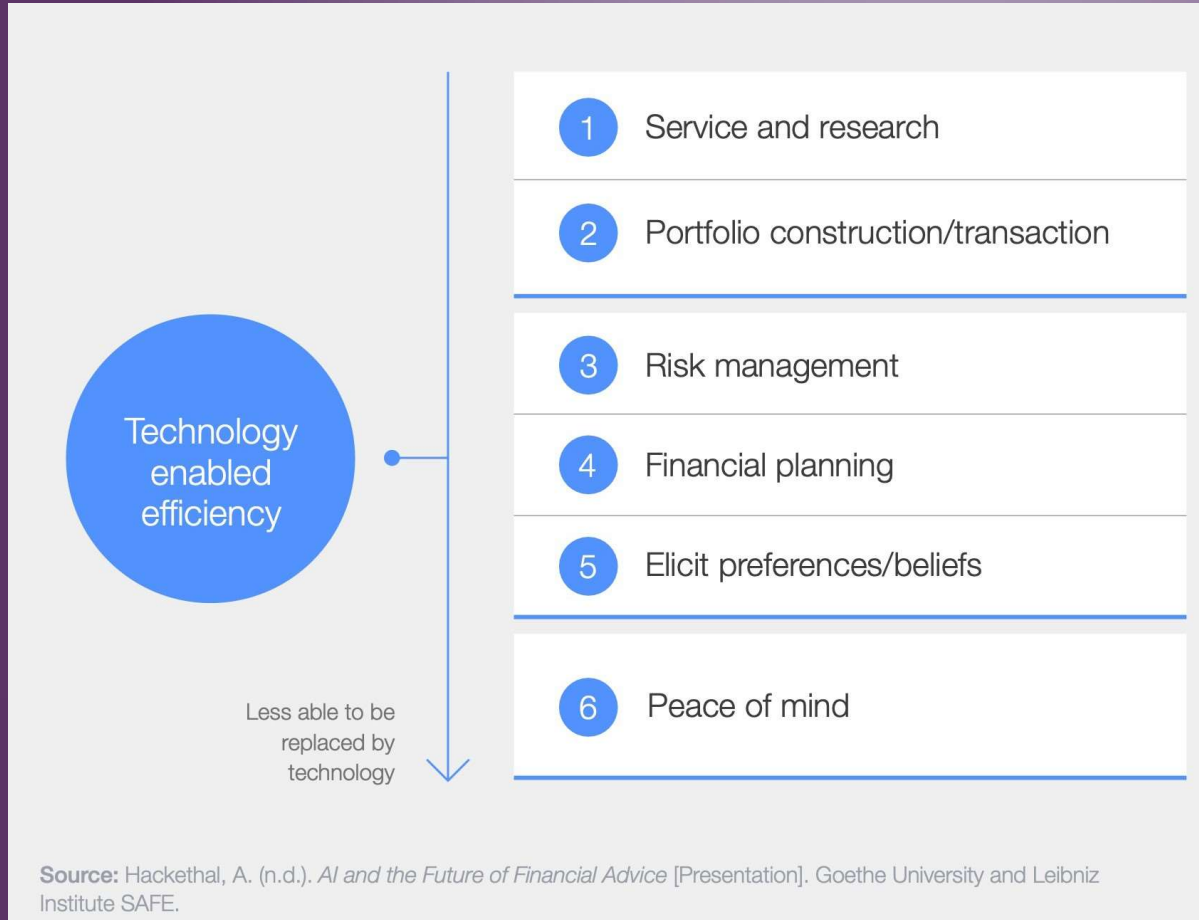
# Financial advice bridges financial skill gap – demand determined by changing size and quality of gap



# Financial advice is a credence good – willingness to pay depends on trust and perceived quality

- **Search good**: no uncertainty on quality:  
electricity, gas, heart medicine
- **Experience good**: quality can be experienced in purchase:  
restaurant, hairdresser, loudspeaker
- **Credence good**: quality hard to measure even after purchase:  
**financial advice**, lawyers, surgeons, mechanics, universities

# Six main roles of financial advice in closing skill gap



Efficiency

Judgement

Empathy

# Neo solved TRANSACTION but not yet JUDGEMENT

NEOBANK  
NEOBROKER  
PAYMENTS

ADVISORY  
PENSION  
INSURANCE

## TRANSACTION

simple low cost

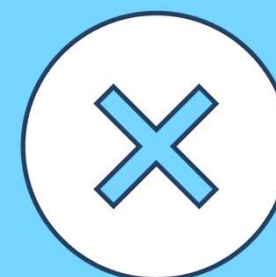
fast convenient

## JUDGEMENT

intuitive coherent

optimized robust

salient tailored



# Six trends identified by WEF



<https://www.weforum.org/publications/the-future-of-financial-advice/>



Changing demographics, including significant wealth transfers and growing diversity, is driving the need for innovation in financial advice.



Individuals are increasingly seeking advice to achieve holistic financial well-being, necessitating a fundamental shift in how advisory services are delivered.



Individuals expect a digitally accessible and hyper-personalized experience from their financial institutions.



Fair and transparent pricing models come with the opportunity to improve trust and affordability for individuals.

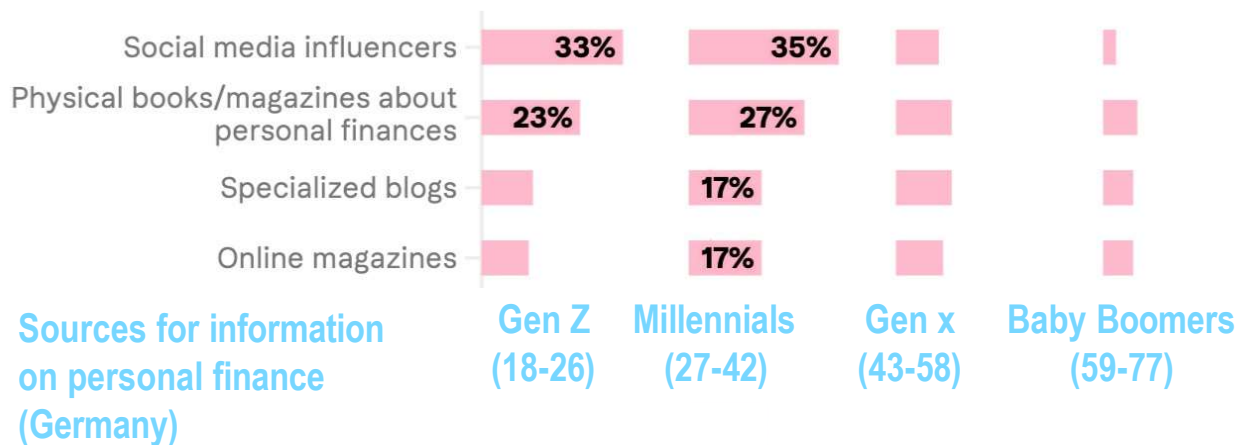


Individuals increasingly use social media as a resource for financial information, but this poses potential risks.

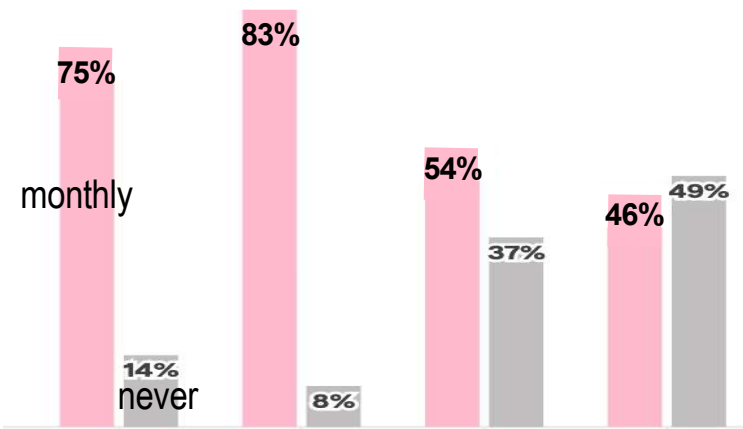


Technology innovation, such as generative artificial intelligence (AI), machine learning and blockchain can bring forward great efficiency gains if deployed responsibly.

# Social media and friends gain in relevance for financial decision making



## People who discuss their finances with friends (Germany)

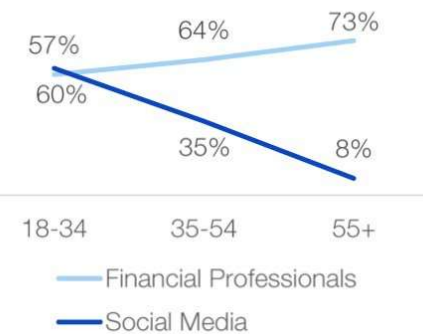


Source: Klarna 2023:  
<https://insights.klarna.com/money-management-pulse/>

**10M combined followers for the Top 10 financial institutions<sup>1</sup> globally<sup>2</sup>**

**64M combined followers for the Top 10 influencers globally<sup>2</sup>**

Main Source of Investment Information (US) Dec 2022<sup>1</sup>





# Applying and documenting superior judgement requires technology and data



Traditionally

Suitability check

Transaction oriented

Wealth reports

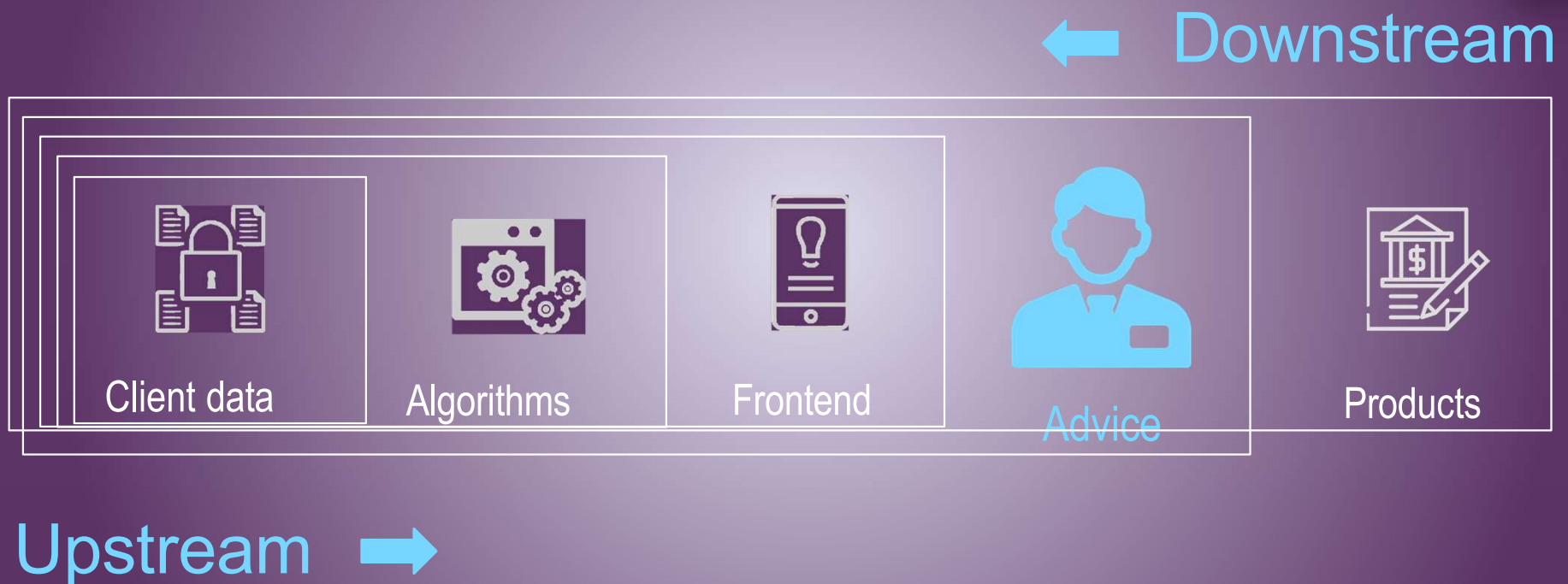
Potentially

Full picture  
aggregation

Personal risk  
management  
“matching people  
with portfolios”

Dynamic  
dashboards

# Judgement adds most value in Upstream model as opposed to today's Downstream model



# Surveys (and WEF) echo need for upstream model

## Strong customer loyalty hinges on six factors

*„Less than one in two state that they get advice aligned with individual goals and needs“*

**Understanding clients' needs,**  
risk appetite, and life stages

**Proactively reaching out**  
at the moments that matter

**Designing simple,**  
engaging experiences

**Taking an expansive view**  
that gives clients confidence  
in their financial future

**Cooking up the right blend**  
of digital and human delivery

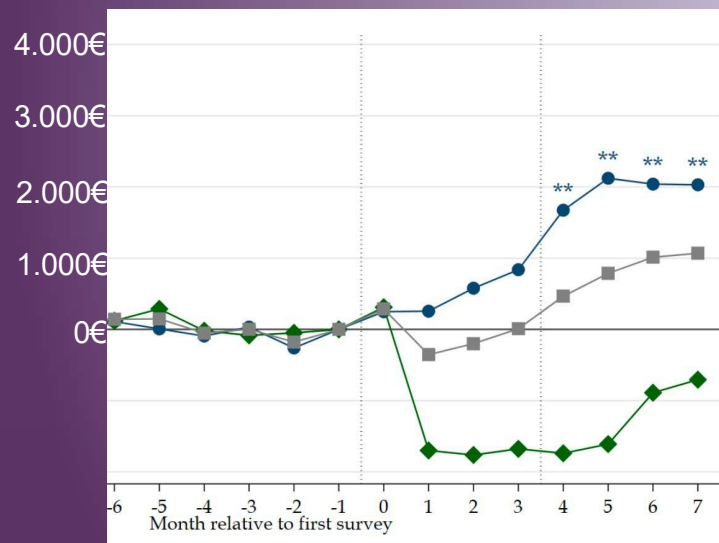
**Creating higher perceived value**  
for the fees charged



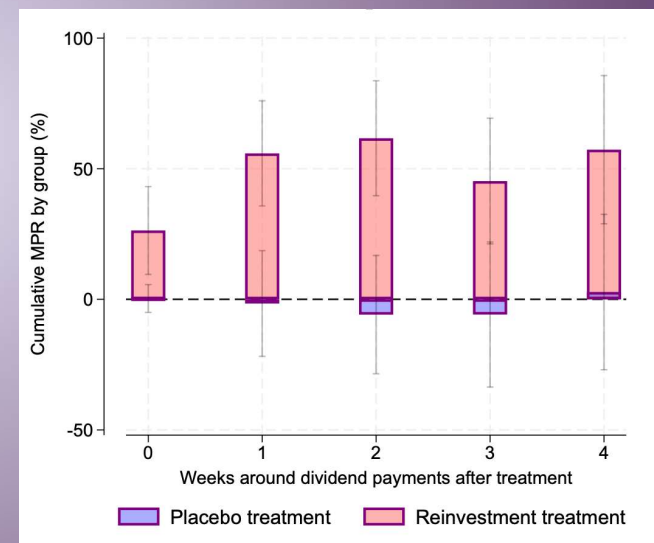
Source: Bain NPS Prism® US Wealth Snapshot Survey, May 2023 (n=21,609) Net Promoter Score™ is a service mark of Bain & Company, Inc., NICE Systems, Inc., and Fred Reichheld. NPS Prism® is a registered trademark of Bain & Company, Inc.

# Data driven education in teachable moments enhances client decision quality

## Pension transparency increases saving propensity



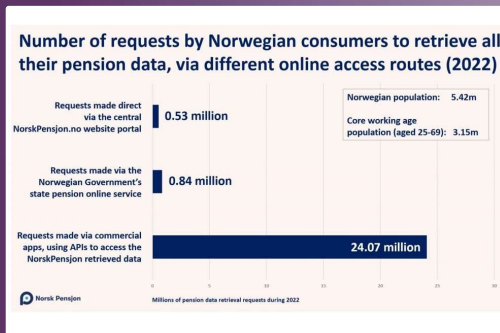
## Investor education results in dividend reinvestment



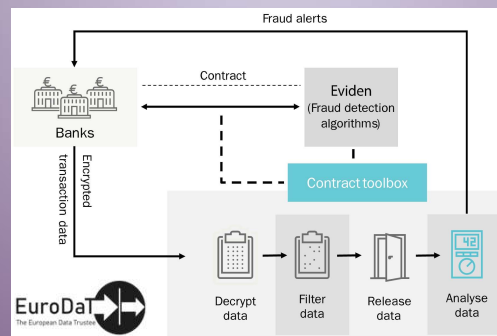
Source: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4251552](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4251552)

# Technology will enhance data availability and predictive power of models

## Data Availability



## Data Sharing



## Data Modeling AI Prediction Machines



Einstein 1 Platform

Parthean

CLEO

Bearly

seasn

„LLMs will transform medicine, media and more. But not without a helping (human) hand.“ (Aug 13,2024)

The big AI models of the moment are very good at generating things, from poetry to photorealistic images, based on patterns represented in their training data. But such models are less good at deciding which of the things they have generated make the most sense or are the most appropriate in a given situation. They are less good at logic and reasoning. It is unclear whether more data will unlock the capability to reason consistently, or whether entirely different sorts of models will be needed. It is possible that for a long time the limits of AI will be such that the reasoning of humans will be required to harness its power.



# Current AI applications no threat to financial advisors

**AI and labor replacement:** settings and occupations where AI tools have been significantly deployed for labor augmentation/replacement specifically for applications in finance

**AI use in trading and asset management:** use by different market participants (e.g., by hedge funds, mutual funds, PE/VC), and different asset classes, and their implications for market equilibrium

**AI use in other financial forecasting:** by management, analysts, market participants, financial market regulators, or other market participants.

**AI use by banks and other credit providers:** credit, wealth management, fraud detection, customer targeting, trading, risk management and hedging.

**AI use for understanding consumer financial behavior and decision-making:** marketing in financial services, modelling complex consumer decisions, and the (good and bad) implications of the use of such technologies in these settings.

**AI use for supervisors and policy makers:** implications for prices, volumes, market volatility, crashes, market design, competitive dynamics, entry and exit of market participants, discrimination, and inequality

Source: Columbia/Review of Financial Studies Call for Papers, Feb 24

# Prompt GPT4o: Data needed for individual pension plan?

## ### Personal Information

1. **Age**: Current age and expected retirement age.
2. **Life Expectancy**: life expectancy and years in retirement.
3. **Health Status**: health issues that retirement needs.
4. **Risk Tolerance**: Comfort level with investment risks, which affects asset allocation.

## ### Financial Information

5. **Current Income**: Annual income and expected changes
6. **Current Savings**: Amount already saved for retirement.
7. **Current Expenses**: Living expenses and expected changes
8. **Debt**: Any outstanding debts and their repayment plans.

## ### Retirement Goals

9. **Desired Retirement Lifestyle**: Expected living standard and associated annual expenses in retirement.
10. **Retirement Location**: Potential changes in cost of living if planning to relocate after retirement.
11. **Estate Planning**: plans for leaving an inheritance/donation

## ### Social Security and Pension

12. **Social Security Benefits**: Estimated benefits from government programs and when to start claiming them.
13. **Employer Pensions**: Any employer-provided pensions and their expected benefits.

## ### Inflation and Tax Considerations

14. **Inflation Rate**: Expected average inflation rate over the savings and retirement period.
15. **Tax Rate**: Current and expected future tax rates, including any tax-advantaged accounts (e.g., 401(k), IRA). donations.

## ### Saving and Asset Allocation

16. **Savings Rate**: Current saving rate and potential to increase it.
17. **Asset Allocation**: Current investment portfolio allocation and diversification.
18. **Investment Returns**: Historical and expected rates of return on investments.

## ### Future Income Streams

19. **Part-time Work**: Any plans to work part-time during retirement.
20. **Other Income**: Rental income, royalties, or other sources of passive income.

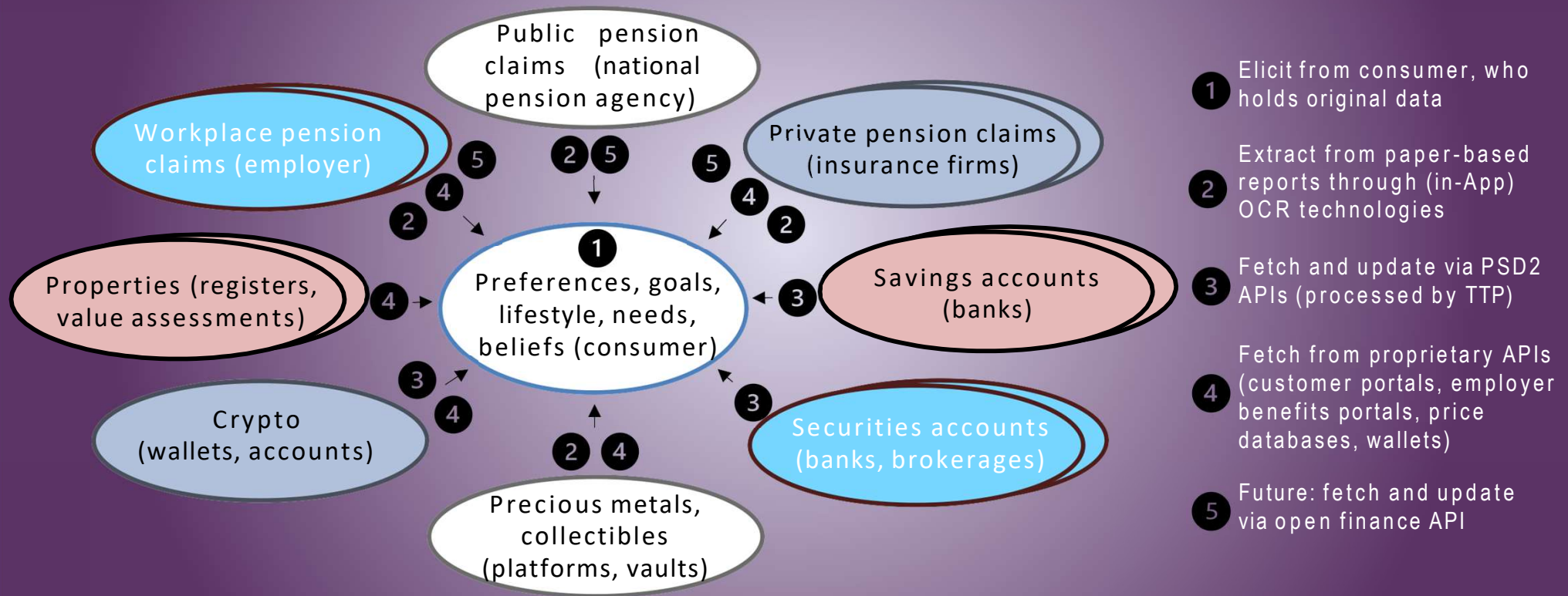
## ### Miscellaneous

21. **Emergency Savings**: Amount set aside for unexpected expenses, ensuring it does not deplete retirement savings.
22. **Healthcare Costs**: Estimated healthcare costs in retirement.
23. **Insurance**: Any existing insurance policies and coverage.
24. **Estate Planning**: Any plans for leaving an inheritance or charitable

...



Raw data is still spread across many institutions - but can technically be consolidated on consumer level



# Prompt GPT4o: Urs and Reto are twins. Urs is a civil servant, Reto is an entrepreneur. All else equal, who should have a higher equity share?

In general, an entrepreneur like Reto should have a **higher equity share** to compared to a civil servant like Urs.

## 1. **\*\*Income Stability\*\***

- **\*\*Urs (Civil Servant)\*\***: Civil servants typically have stable and predictable income, often with lower risk of job loss. This stability allows Urs to take on more investment risk
- **\*\*Reto (Entrepreneur)\*\***: Entrepreneurs usually have more variable and less predictable income streams. Reto's business activities already expose him to significant risk, so he should diversify his investments away from equities.

## 2. **\*\*Diversification\*\***

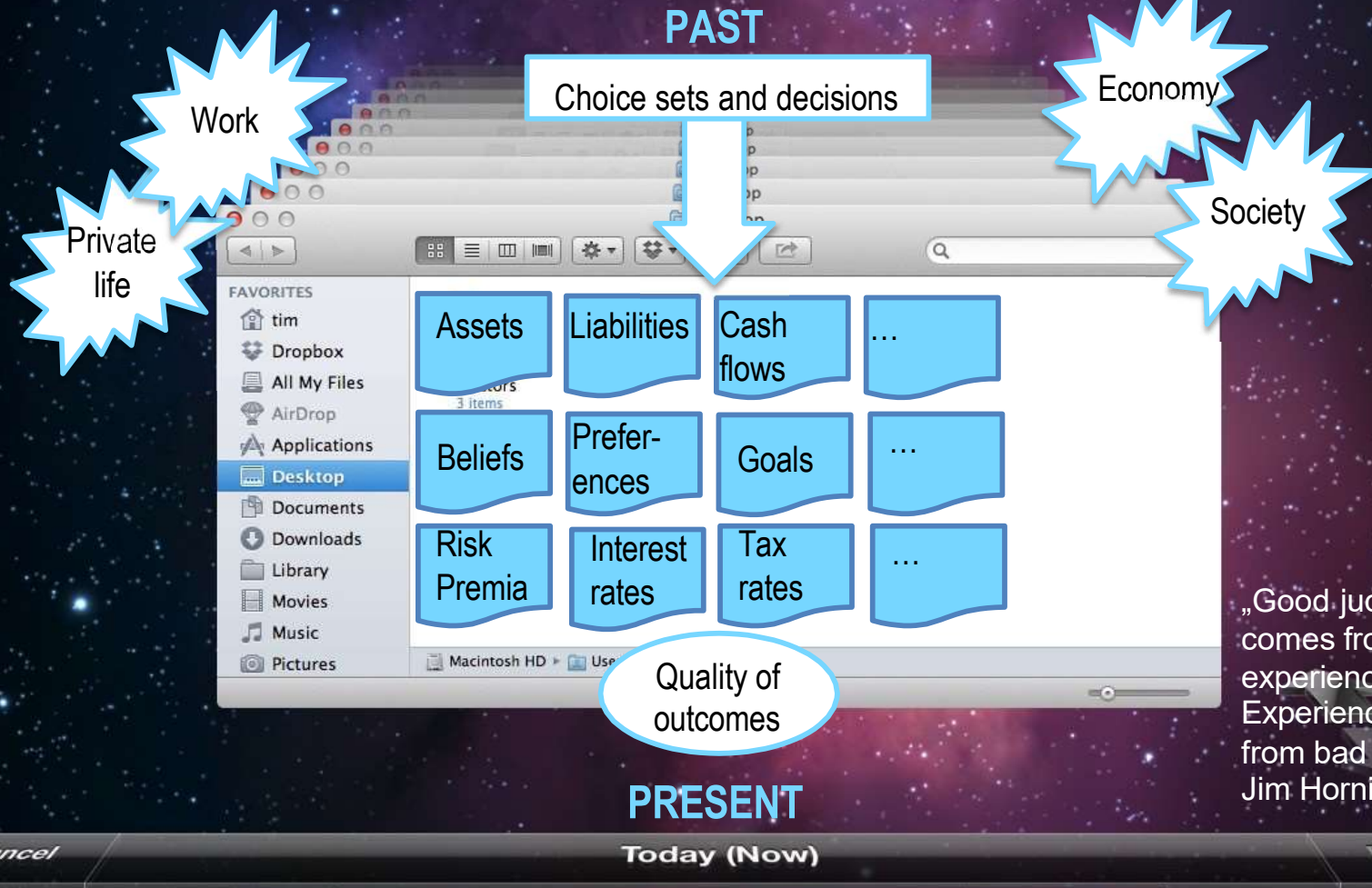
- **\*\*Urs\*\***: Can afford to have a balanced portfolio with a reasonable equity share because his income provides a stable financial foundation.
- **\*\*Reto\*\***: Needs to diversify his investments away from high-risk equities to reduce overall portfolio risk. Since his business already represents a significant equity-like investment, his portfolio should include safer, more liquid investments.

## 3. **\*\*Financial Goals and Horizon\*\***

- **\*\*Urs\*\***: Likely has a steady financial goal trajectory with a predictable timeline, allowing for a typical asset allocation strategy.
- **\*\*Reto\*\***: His financial goals may be more variable and dependent on the success of his business, requiring more flexibility and less risk in his investment portfolio.

Considering these factors, Reto, the entrepreneur, should generally have a **higher equity share** in his portfolio

Predictive models require path data on state variables, individual decisions and outcome quality (KPIs with benchmarks)



„Good judgement comes from experience. Experience comes from bad judgement.“  
Jim Horning

Predictive models will deliver guidance for hybrid advisory model, and possibly serve as foundation for (autonomous) AI assistants





# The Economist (Aug 29, 24) fascinated by Digital Twins as ultimate sandbox for health and finance

## Digital twins are fast becoming part of everyday life

Welcome to the mirror world

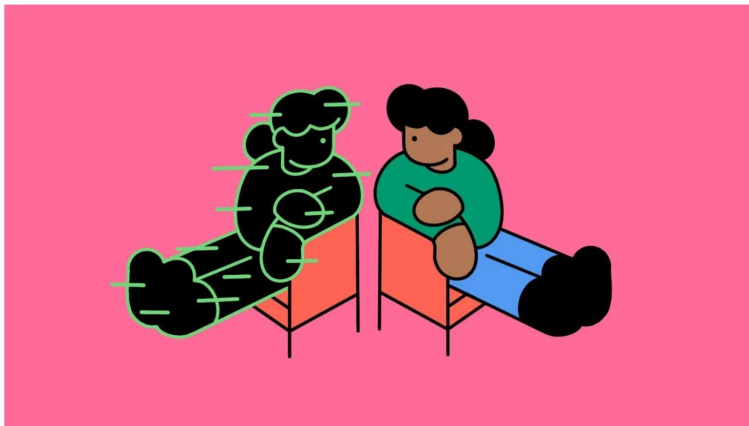


ILLUSTRATION: TRAVIS CONSTANTINE

Aug 29th 2024

Save

Share

Give

Today's digital twins extend this process, making it easier for humans to tackle complex problems. They can act as virtual crystal balls, allowing people to peer into the future, spot problems before they materialise and test wild ideas without real-world consequences. For businesses, this should mean better designs, more streamlined operations and fewer costly blunders. For society, the promise is equally tantalising: personalised health care, cities that flow and breathe more easily and, thanks to the threats exposed by climate modelling, clues as to how the planet might avoid environmental catastrophe. Digital twins offer the ultimate sandbox in which castles can be built and tested before being made real.

# Example for hybrid (retail/affluent) advisory tool: Seasn

Pick a suitable  
template

Personalize  
template

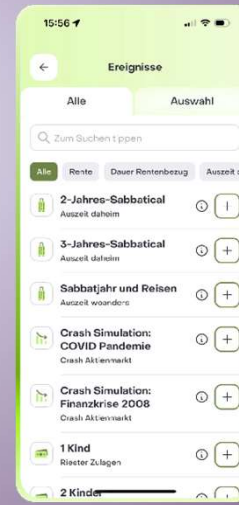
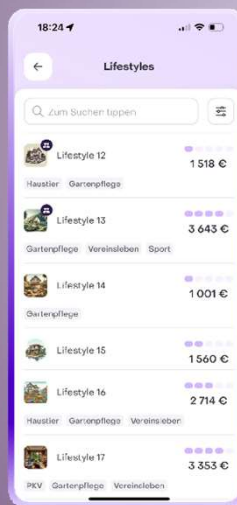
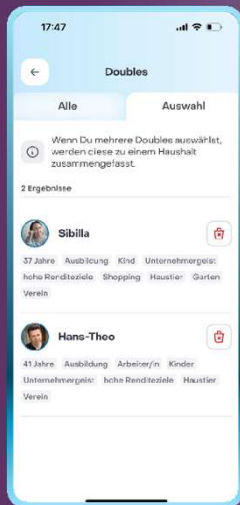
Select pension  
lifestyle

Check your  
pension gap

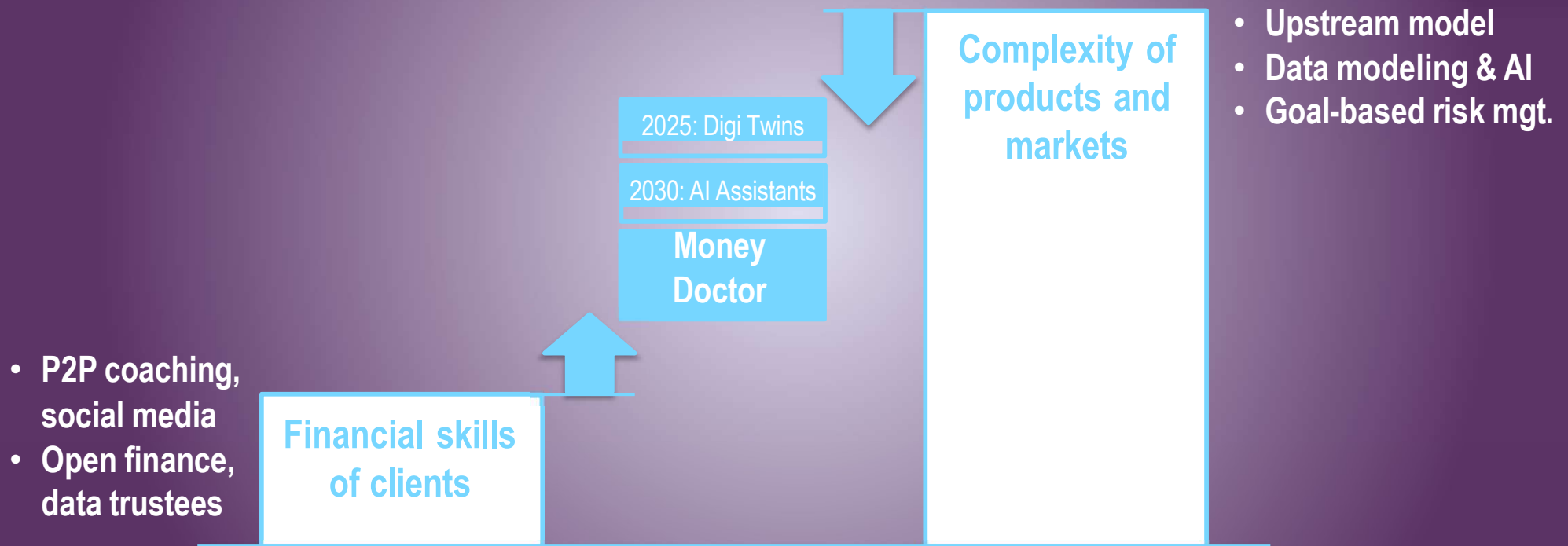
Explore what  
might happen

Download your  
products

Explore  
solutions



# Hybrid financial advice will allow creating measurable client value through better judgement quality



# Regulation: Low-cost policy interventions might unlock transparency about consumer value from industry

## How to define value from advice?

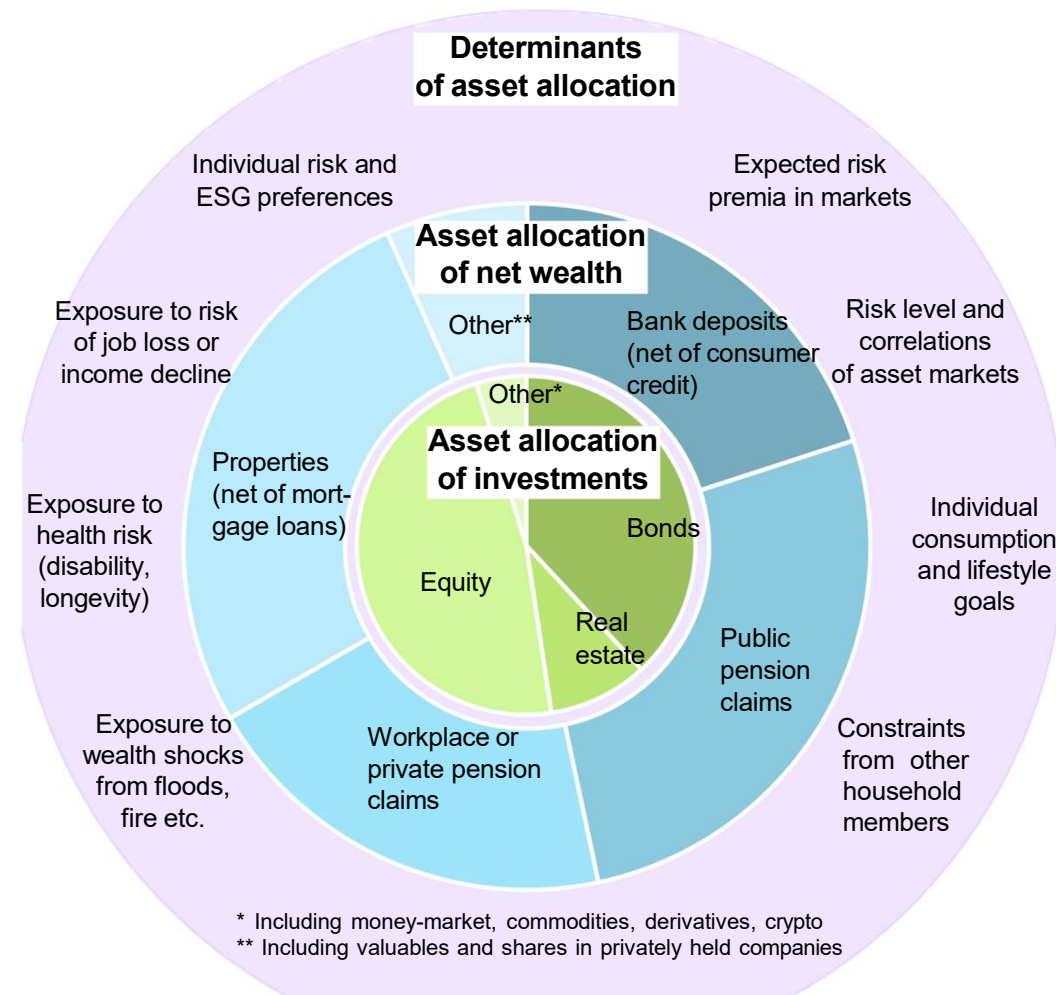
- Normative household finance research produced a comprehensive set of KPIs for all major dimensions of personal finance.
- Most KPI apply to both, individual and household level.
- Policy can endorse EU-wide standard KPIs to ensure comparability and aid (certified) personal finance apps signal neutrality.
- Consumer benchmarks are either market based (ex post risk-adjusted returns), normative (x% income drop in retirement) or based on peer comparison (savings rate in lowest decile).

## How to collect data?

- Build on (emerging) national pension dashboards to collect individual pension claims across all three pillars. Allow consumers to fetch data via API.
- Ensure that banks and brokerages deliver full history of consumer transactions across all accounts.
- Ensure (low-cost) access to high-quality price data on essential asset classes.
- Personal finance apps can then produce standardized KPIs.
- Consumer can infer created value from delta in KPI with benchmarks over time.



# Dashboards will enable consumers to better assess suitability of asset allocation and overall value from financial services



## Reconciling Personal Investment Plans with Personal Finance Dashboards

- Asset allocation (AA) is driving investment returns in the long run, because AA determines market risk exposure and hence achievable risk premia
- Literature implies that "market timing" does not work. Consequently, the AA for an investment portfolio should be a function of individual determinants and long-term market parameters.
- The AA of investments should reflect the individual risk exposure from background wealth such as housing, pension claims, and human capital. Examples: ownership of properties calls for less real estate funds; younger people, civil servants and those with safe pension claims should afford higher equity shares.
- For most consumers, the "big picture" view, including deposits, safe pension assets, any properties (all fairly safe), will suggest more capital market participation.
- Good investment advice on AA requires (at least approximate) data on individual background risk and preferences. Dashboards like Seasn allow consumers to avail this data to their advisors of choice and to check recommendations against needs.
- Suitable risk exposure from optimal AA in the investment portfolio is one important KPI of financial health. Others are: starting to save early, saving a sufficient share of income, maintaining emergency funds, insuring against ruinous risks, diversifying risk across assets, minimizing product cost.
- Dashboards like Seasn measure and display factors such as suitability of AA, total risk exposure, product cost through time. Consumers can better assess true quality and cost of advisory services and products.
- Dashboard data will equip owner with competitive advantage in training and operating private finance AI models

## Summary: five main theses

- To safeguard margins, advice ought to be transformed from credence good into **experience good**
- Superior client experience requires **value-add advisor judgement** (money doctor).
- Value-add judgement requires **strong data and tech support**
- Open finance, data trustees and AI will be offering this support via **specialized third parties**
- Future Advisory needs clear-cut **hybrid advice model** and sound **partnering strategy**