



October 8th, 2026

Behaviour, financial literacy and the limits of AI advice

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Agenda

Five questions on AI in financial decision making

- 1** **Intro – Is AI just the “new Dr Google”?**
- 2** **Is AI (LLMs) reliable in giving financial recommendations?**
- 3** **How much people really know about AI?**
- 4** **How much investors are prone to adopt AI in taking financial decisions?**
- 5** **Humans Vs AI: Who gives the best advice?**

Two kinds of financial advice

AI does not affect all advice equally.

To see where it disrupts most, we separate two things.

INVESTMENT GUIDANCE

Risk profiling and asset allocation

Answers: “What should I invest in?”

- Assess the client’s risk profile
- Recommend a mix of equities, bonds and cash
- Largely rules-based and standardised

In this study: investment portfolios

GOAL-BASED FINANCIAL PLANNING

The whole of a client’s financial life

Answers: “How do I reach my goals, and stay on track?”

- Objectives and family circumstances
- Liabilities and retirement income
- Protection
- Behaviour over time

In this study: emergency savings, retirement withdrawals, life, health and auto insurance

The question: which part can AI replace, and where does the adviser remain decisive?



01

Intro – Is AI just the “new Dr Google”?

1. Intro – Is AI just the “new Dr Google”?
2. Is AI (LLMs) reliable in giving financial recommendations?
3. How much people really know about AI?
4. How much investors are prone to adopt AI in taking financial decisions?
5. Humans Vs AI: Who gives the best advice?

Self-made diagnosis issues?

...Nothing new on the horizon

1

It is easy

2

It is fast

3

It is cheap

Self-made diagnosis issues?

...Nothing new on the horizon.
But now...

BUT NOW...

**Large
language
models**

1 It is easier

2 It is faster

3 It is cheap(er?)

Self-made financial counselling?

...Nothing new on the horizon.
But now...

BUT NOW...



1 It is easier

2 It is faster

3 It is cheap(er?)



02

Is AI (LLMs) reliable in giving financial recommendations?

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The academic literature

From “generic” advice to “good preliminary guidance”

Schlosky et al. 2024	“21 financial cases... Advice reported as “generic”... ChatGPT did not mention alternatives and did not prioritized recommendations.”
Oehler and Horn 2024	“Developed investor profiles and fed them into ChatGPT and 17 robo-advisors asking for recommendations for investment portfolios... ChatGPT outperforms all but three of the robo-advisors.”
Alam and Siddiquei 2024	“12 tax-related prompts and asked ChatGPT and Google Bard for advice... then evaluated by 10 Chartered Accountants (based on nine criteria)... The respondents favored Google Bard for accuracy but ChatGPT for other characteristics, including breadth of responses.”
Nicolini, Cude, Chatterjee, 2026	“Three cases (emergency funds, optimal withdrawal rate from retirement funds, best investment portfolio composition) in three households' scenarios (male, female, African American male)... Recommendations make sense... Differences across LLMs... Good preliminary guidance.”

Is GenAI a good financial advisor?

Three cases: emergency savings, retirement funds and investment portfolios

Emergency Savings



The appropriate amount of emergency savings to hold.

GOAL-BASED PLANNING

Retirement Funds



The optimal withdrawal rate from retirement funds.

GOAL-BASED PLANNING

Investment Portfolios



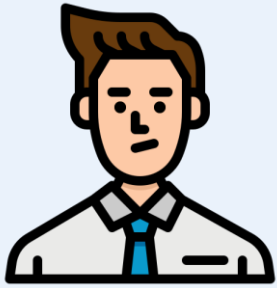
Composition of investment portfolios.

ASSET ALLOCATION

Emergency savings to hold

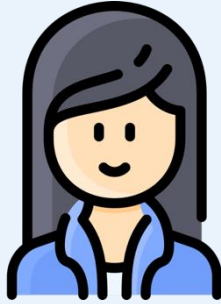
The appropriate amount of emergency savings to hold:
one household profile, three different leads

CASE TYPE: GOAL-BASED PLANNING



**White male
lead (WML)**

Or



**White female
lead (WFL)**

Or



**African
American
male lead
(AAM)**



Age: 30-year-old
Marital status: Married couple
Residence: St. Louis, Missouri
Children: 2 (ages two and four)
Job: Full time employed
Spouse: Unemployed
Housing: Ownership (with mortgage)

Optimal retirement withdrawal rate

The optimal withdrawal rate from retirement funds:
one household profile, three different leads

CASE TYPE: GOAL-BASED PLANNING



**White male
lead (WML)**

Or



**White female
lead (WFL)**

Or



**African
American
male lead
(AAM)**



Age: 67-year-old

Marital status: Married couple

Residence: St. Louis, Missouri

Children: 2 (financially independent)

Job: Retired

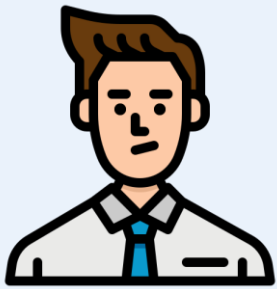
Insurance: Medicare and suppl. insurance

Housing: Ownership (no mortgage)

Composition of investment portfolio

Composition of investment portfolio:
one household profile, three different leads

CASE TYPE: ASSET ALLOCATION



**White male
lead (WML)**

Or



**White female
lead (WFL)**

Or



**African
American
male lead
(AAM)**

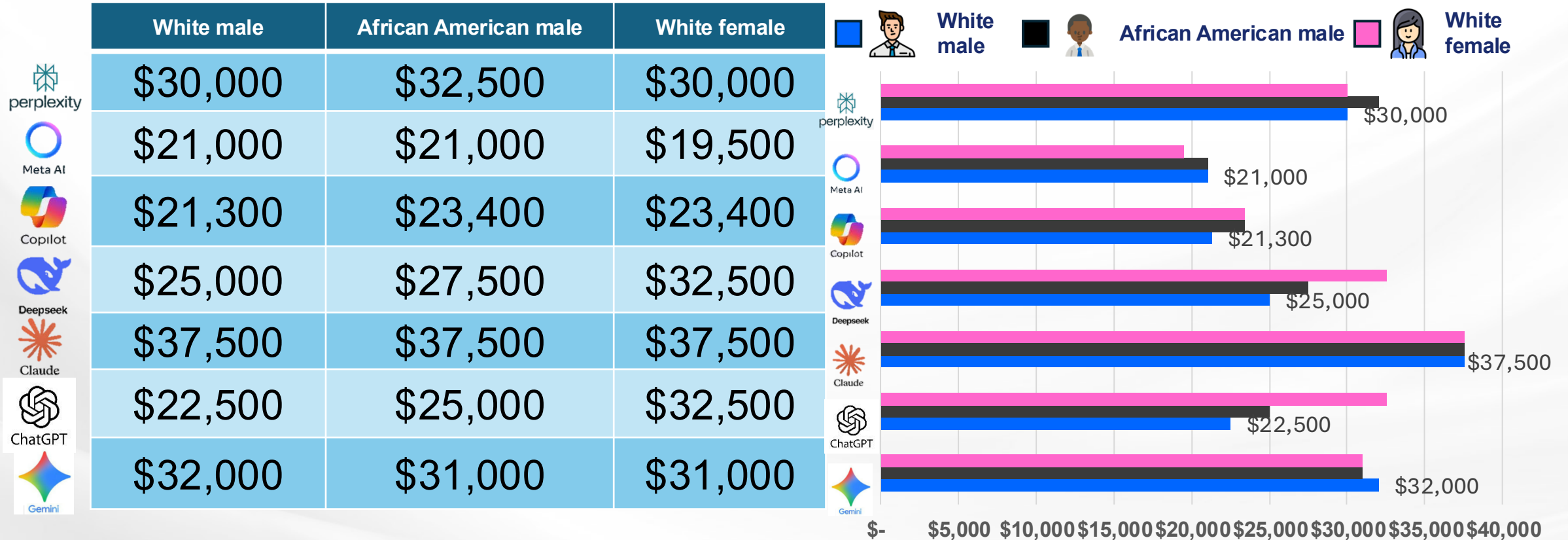


Age: 30-year-old
Marital status: Married couple
Residence: St. Louis, Missouri
Children: 2 (age of two and four)
Gross Annual Income: \$100,000
Investment: \$300,000
Time Horizon: 10 years
Risk Tolerance: Low

Emergency savings: results

Recommended emergency savings, by LLM and household lead:
from \$19,500 to \$37,500

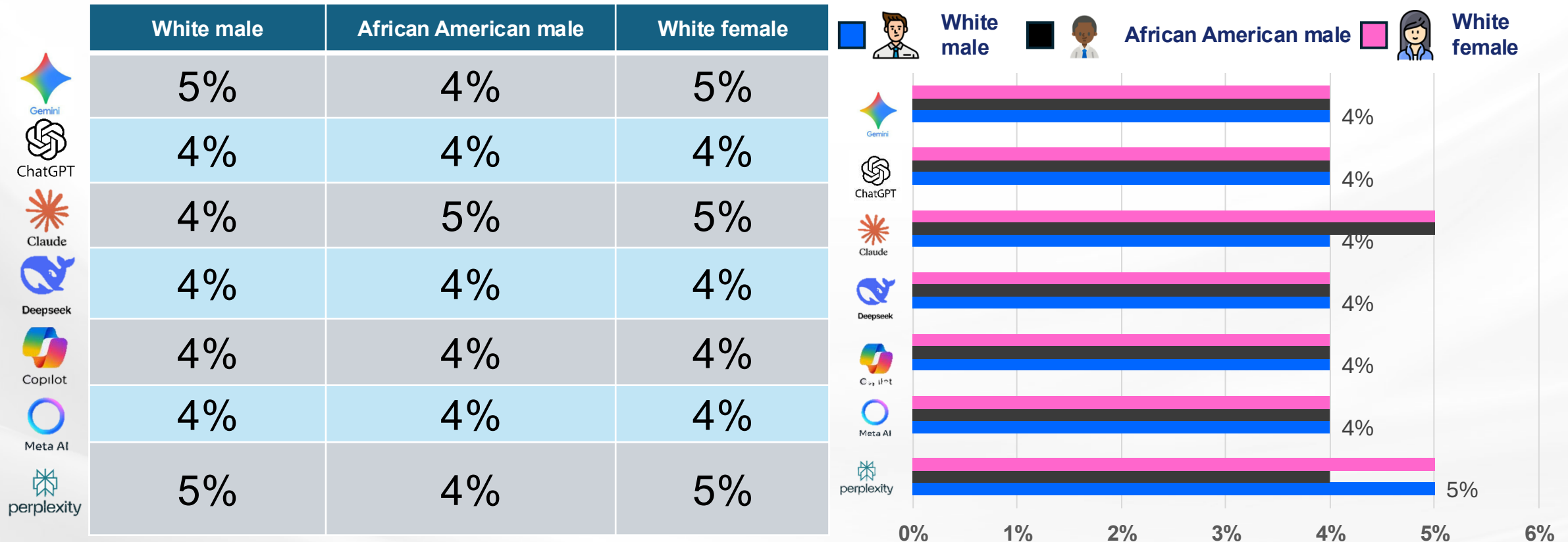
CASE TYPE: GOAL-BASED PLANNING



Retirement withdrawal rate: results

Recommended withdrawal rate, by LLM and household lead:
LLMs converge on 4–5%

CASE TYPE: GOAL-BASED PLANNING



Asset allocation: results

For the same investor profile,
equity weights range from 15% to 45%

CASE TYPE: ASSET ALLOCATION

	Equities			Bonds			Cash			Other		
Model	WML	AAM	WFL	WML	AAM	WFL	WML	AAM	WFL	WML	AAM	WFL
ChatGPT	22.5	22.5	22.5	55	55	55	12.5	12.5	12.5	10	10	10
Claude	40	40	40	50	50	50	10	10	10	0	0	0
Copilot	45	45	45	40	40	40	10	10	10	5	5	5
Deepseek	30	15	30	40	75	40	15	0	15	15	10	15
Meta AI	35	40	30	55	55	60	0	0	0	10	5	10
Perplexity	25	25	25	45	45	45	15	15	15	15	15	15

Equities: 15% to 45% across LLMs for the same investor profile.
Deepseek: 15% equities for the African American male lead vs 30% for the other two leads.



03

How much people really know about AI?

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Survey data

An online survey of
2,000 Italian adults (18-65), June 2026

SPONSOR	University of Rome Tor Vergata (Rome, Italy)
SOURCE	Online survey (CAWI) by Dynata
TIMING	June 2026
TARGET	2,000 Italian Adults (18-65)
MAIN TOPICS	AI, investment decisions, mutual funds, financial education

2,000

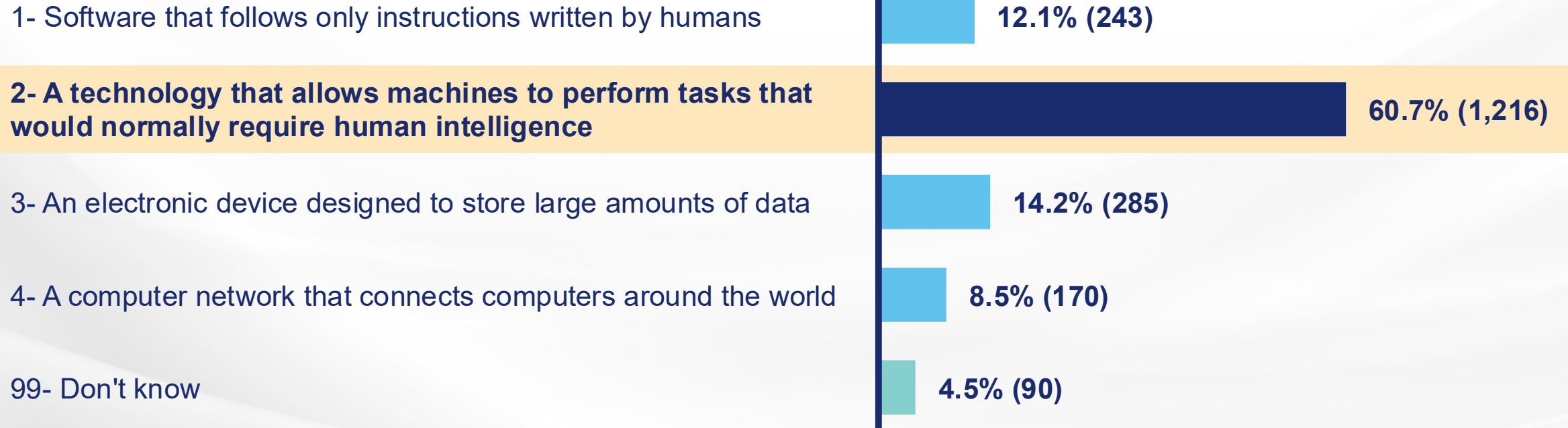
**Italian adults
aged 18-65**

June 2026

What does 'AI' mean?

Only 60.7% identify a correct definition of AI

"Let's talk about Artificial Intelligence. Which of the following statements best describes what is meant by 'Artificial Intelligence'?"



Data: University of Rome Tor Vergata online survey (CAWI) by Dynata, June 2026; 2,000 Italian adults (18-65).

Who knows what AI means?

Who is more likely to know what AI means?*

Knowledge of AI grows with income, wealth and financial literacy

YES	NO
▼ YES - Jobs requiring financial skills (-0.359**) ▲ YES - Income (0.119**) ▲ YES - Wealth (0.733*) ▲ YES - Financial literacy (0.373***) ▲ positive coefficient ▼ negative coefficient	NO – Gender NO – Region (North-Center-South) NO – Age NO – Education



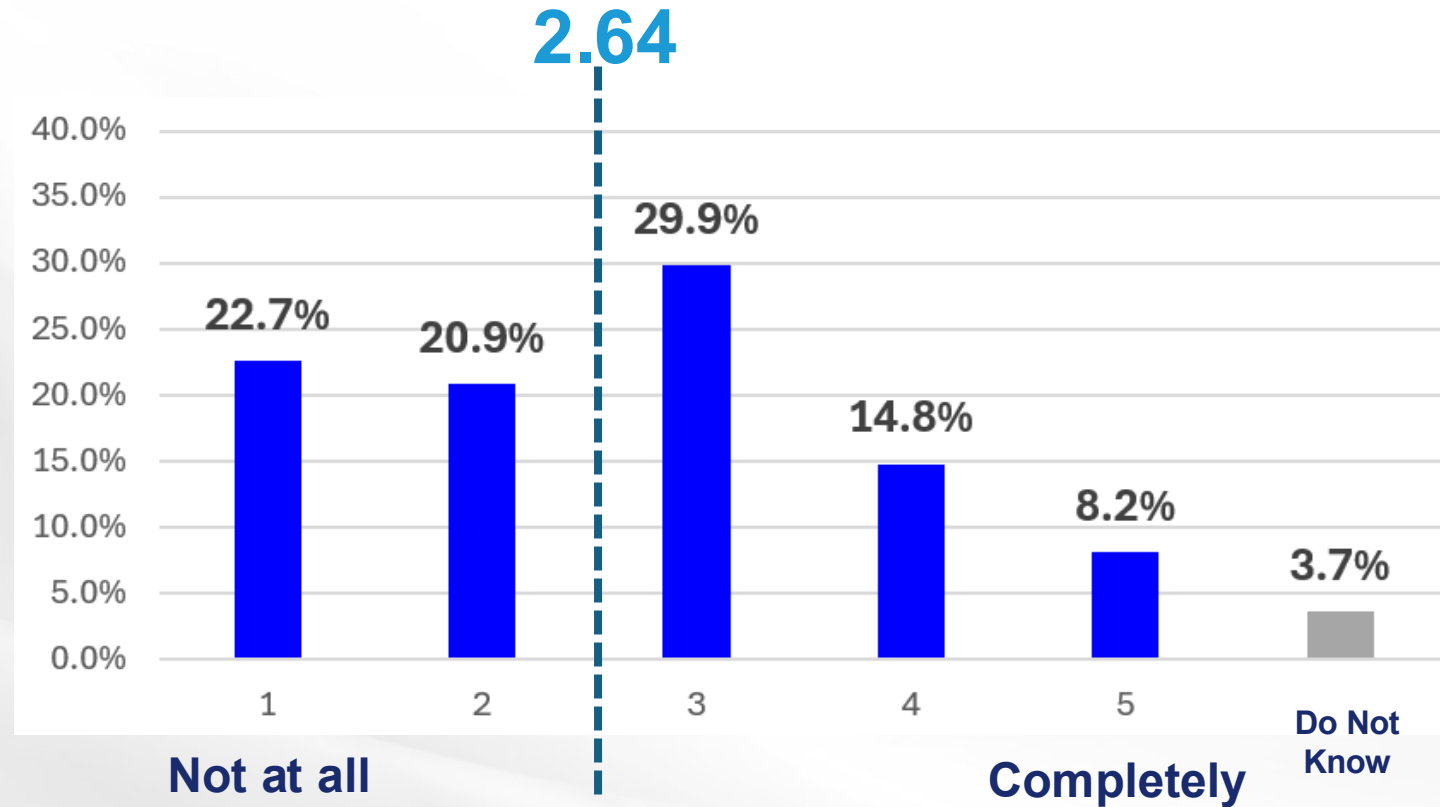
04

How much investors are prone to adopt AI in taking financial decisions?

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Comfort with AI-only advice

“How comfortable do you feel receiving financial advice on your investment decisions from AI?” (Alonly)



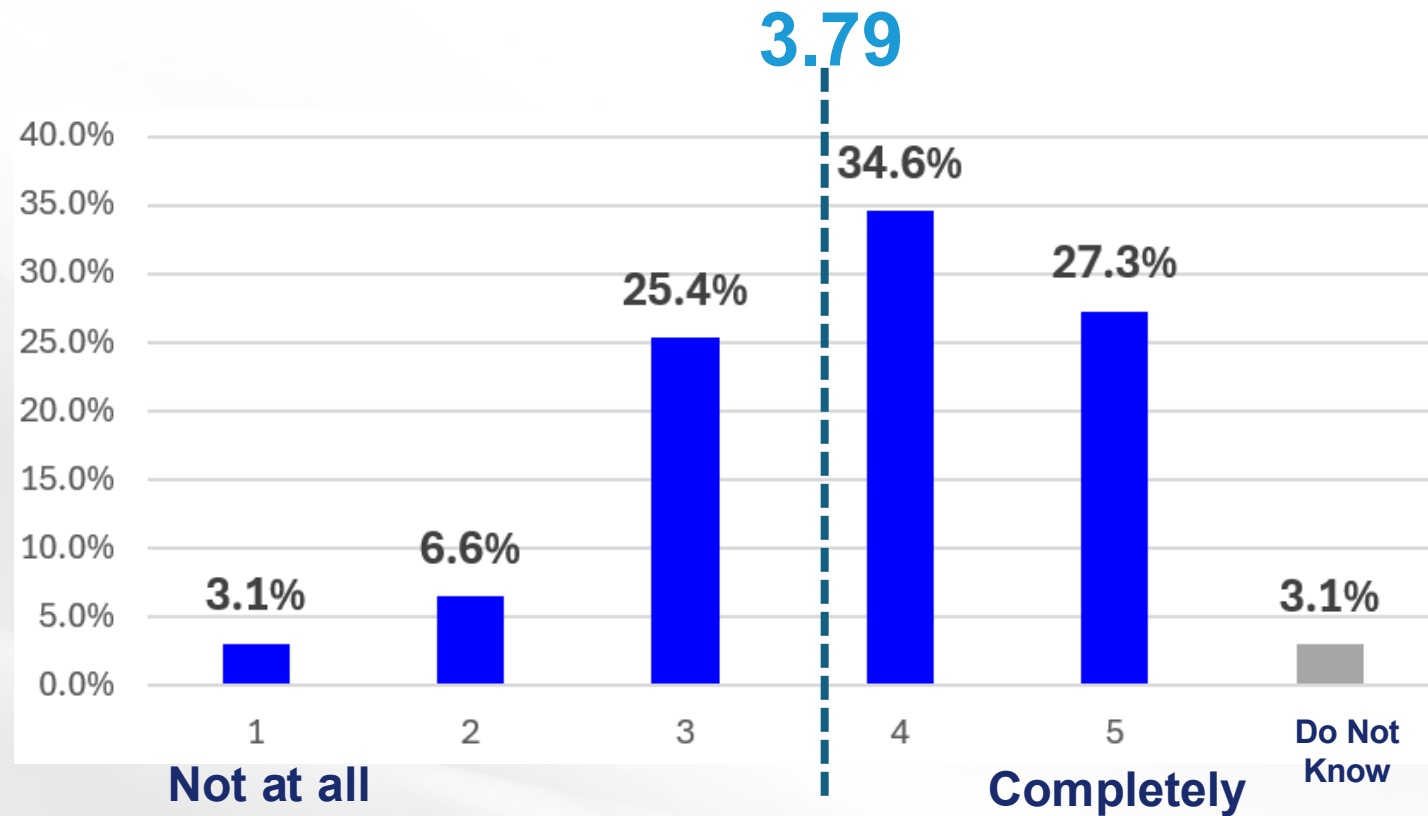
2.64

Average
(1 = Not at all, 5 = Completely)

Freq.	Alonly
453	1 – Not at all
418	2 – A little
597	3 – So and so
296	4 – A lot
163	5 - Completely
73	(I do not know)

Comfort with a human advisor

“How comfortable do you feel receiving financial advice on your investment decisions from a human financial advisor?” (Humanonly)



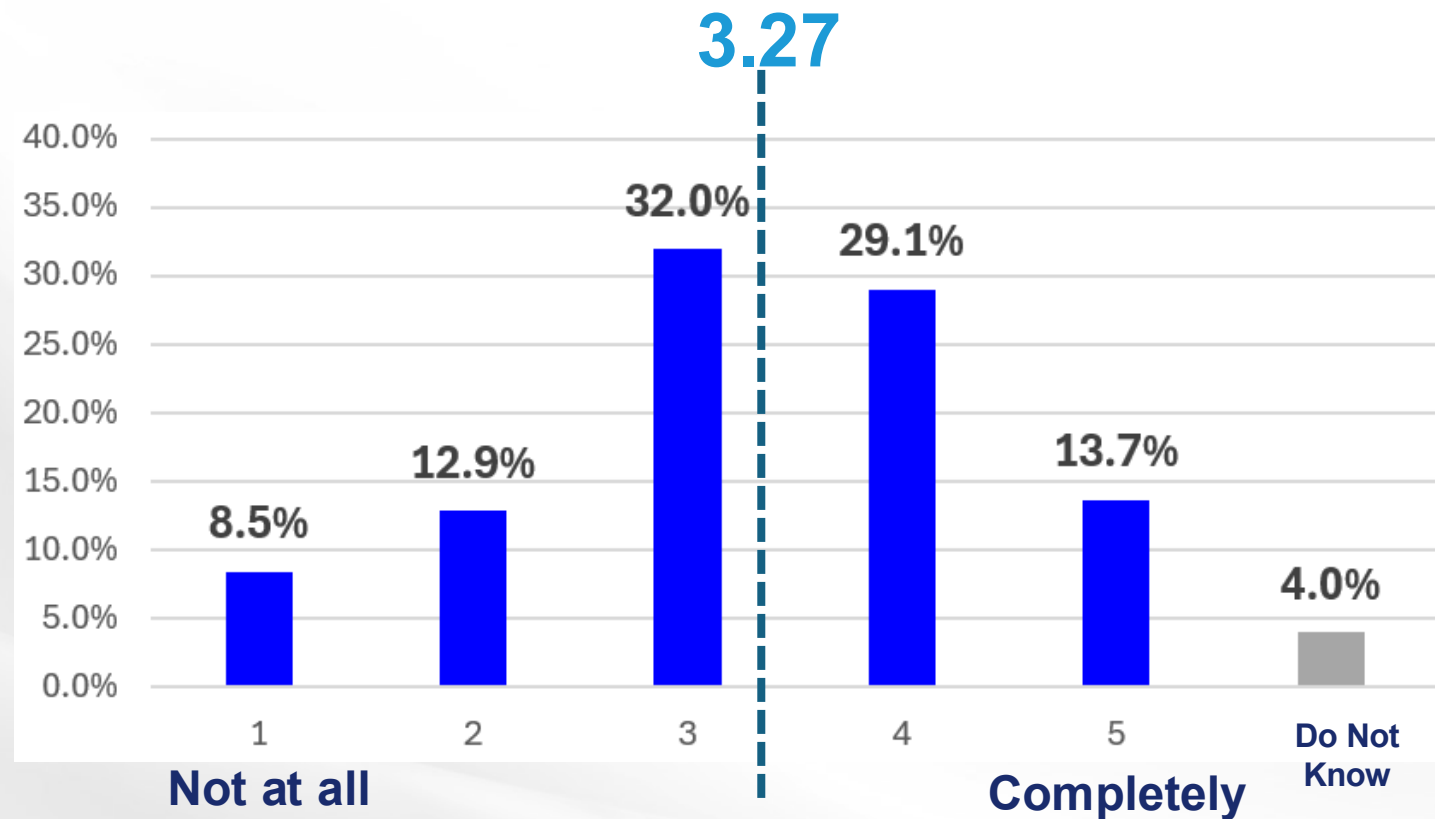
3.79

Average
(1 = Not at all, 5 = Completely)

Freq.	Alonly
62	1 – Not at all
131	2 – A little
508	3 – So and so
692	4 – A lot
546	5 - Completely
61	(I do not know)

Comfort with a human advisor using AI

"How comfortable do you feel receiving financial advice on your investment decisions from a human financial advisor who makes decisions with the support of AI?" (HumanwithAI)



3.27

Average
(1 = Not at all, 5 = Completely)

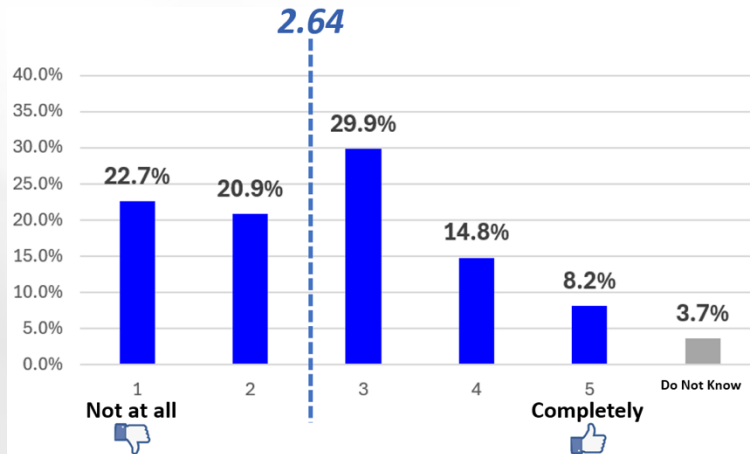
Freq.	Alonly
169	1 – Not at all
257	2 – A little
639	3 – So and so
581	4 – A lot
274	5 - Completely
80	(I do not know)

Who is more likely to be in favour?

Who is more likely to be in favour of...

AI only, a human advisor with AI, or a human advisor only?

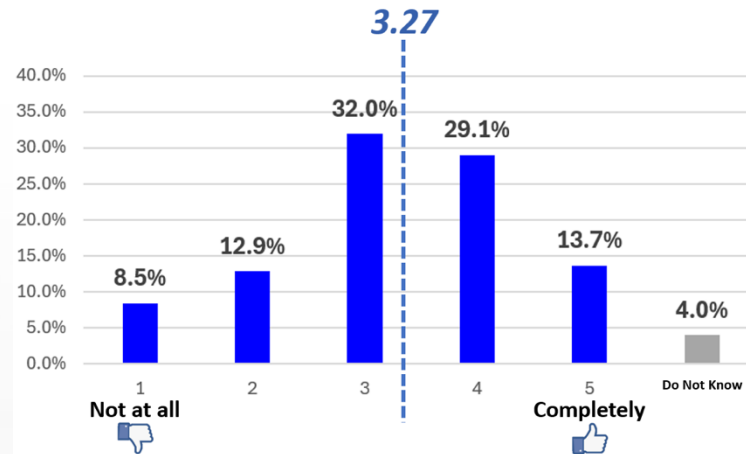
AI only (Alonly)



2.64

average comfort (1–5)

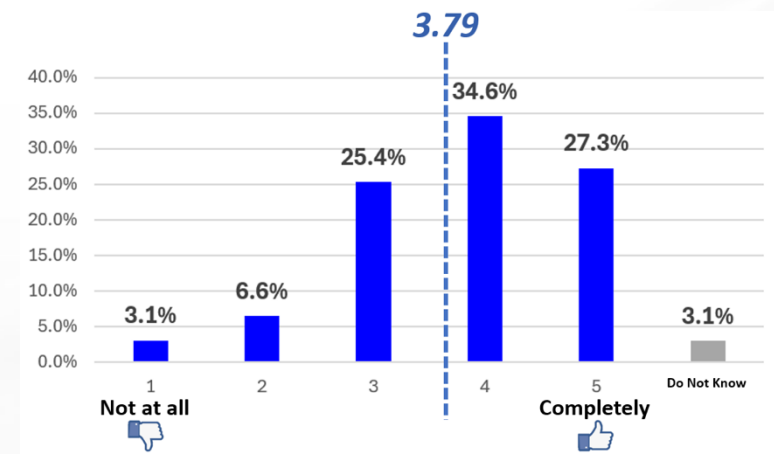
Human advisor with AI (HumanwithAI)



3.27

average comfort (1–5)

Human advisor only (Humanonly)



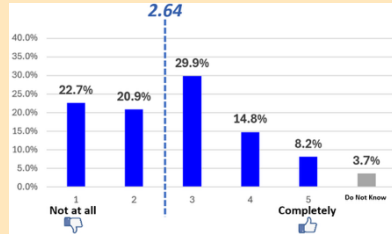
3.79

average comfort (1–5)

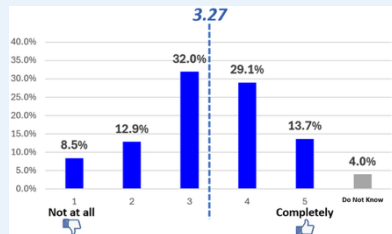
In favour of AI-only advice

Who is more likely to be in favour of...
 ...AI only (Alonly)

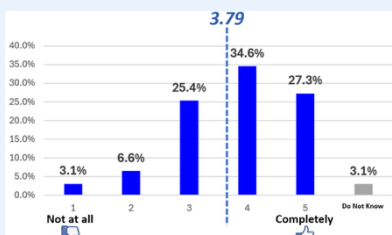
AI only



Human advisor with AI



Human advisor only



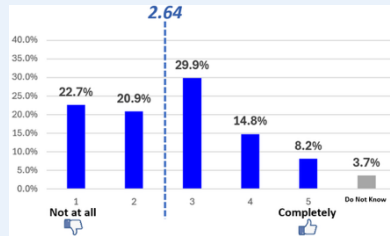
- ▼ YES – Age 45-54 (-0.4095*)
- ▼ YES – Age 55-65 (-0.4952**)
- ▲ YES – Jobs requiring financial skills (0.2279**)
- ▼ YES – Living in suburban area (-0.4107***)
- ▼ YES – Living countryside (-0.2252*)
- ▼ YES – Wealth (-0.1451**)
- ▼ YES – Monitoring financial markets (-0.1779***)
- ▼ YES – To have a financial advisor (-0.2583**)
- ▼ YES – Financial literacy (-0.042**)
- ▼ YES – Knowledge on AI (-0.2594**)
- ▲ YES – AI use frequency (0.5461***)

In favour of a human advisor with AI

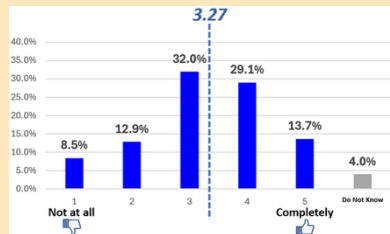
Who is more likely to be in favour of...

...a human advisor who uses AI (HumanwithAI)

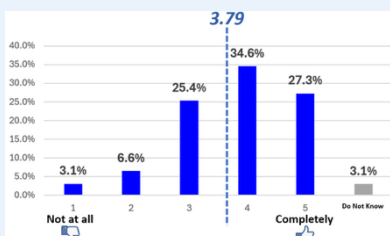
AI only



Human advisor with AI



Human advisor only

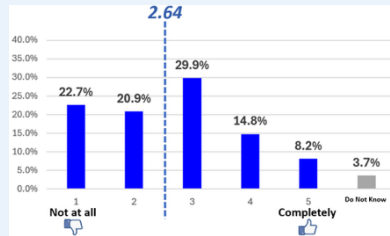


- ▼ YES – Living in suburban area (-0.2619**)
- ▼ YES – Long investment background (-0.1520**)
- ▲ YES – Asset management service (0.2969**)
- ▲ YES – Cryptoasset investment (0.3583**)
- ▲ YES – To have a financial advisor (0.2121*)
- ▲ YES – AI use frequency (0.5136***)

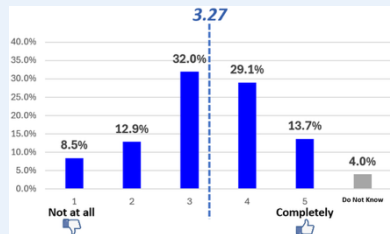
In favour of a human advisor only

Who is more likely to be in favour of...
 ...a human advisor only (Humanonly)

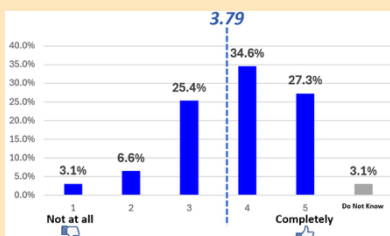
AI only



Human advisor with AI



Human advisor only



- ▼ YES – Age 25-34 (-0.3892*)
- ▼ YES – Jobs requiring financial skills (-0.2984**)
- ▼ YES – Living in suburban area (-0.2705**)
- ▼ YES – Living in countryside (-0.2797**)
- ▲ YES – Long investment background (0.1136*)
- ▲ YES – To have a financial advisor (0.5655***)
- ▼ YES – Financial literacy (-0.0332*)
- ▼ YES – AI use frequency (-0.1806***)

The role of AI at individual level

How comfortable do you feel receiving financial advice on your investment decisions from...
(Intra-individual variation)



The role of AI at individual level

How comfortable do you feel receiving financial advice on your investment decisions from...
 (Intra-individual variation)



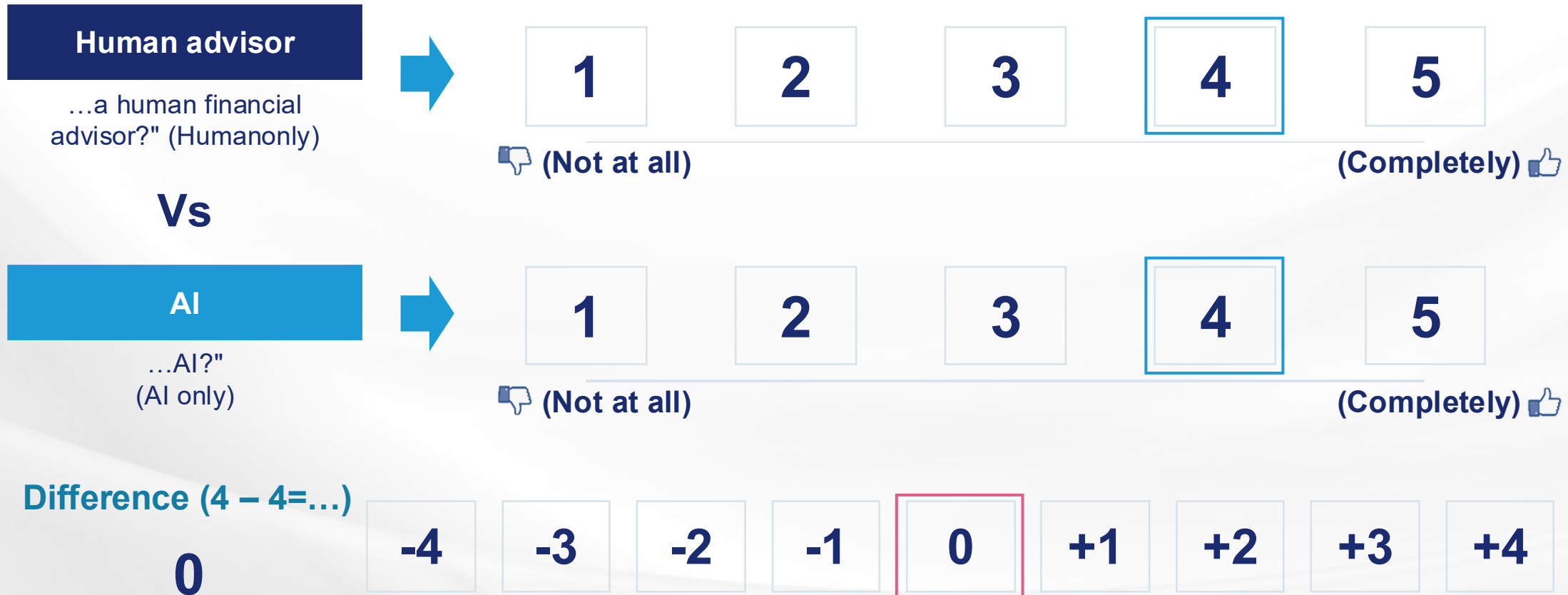
The role of AI at individual level

How comfortable do you feel receiving financial advice on your investment decisions from...
 (Intra-individual variation)



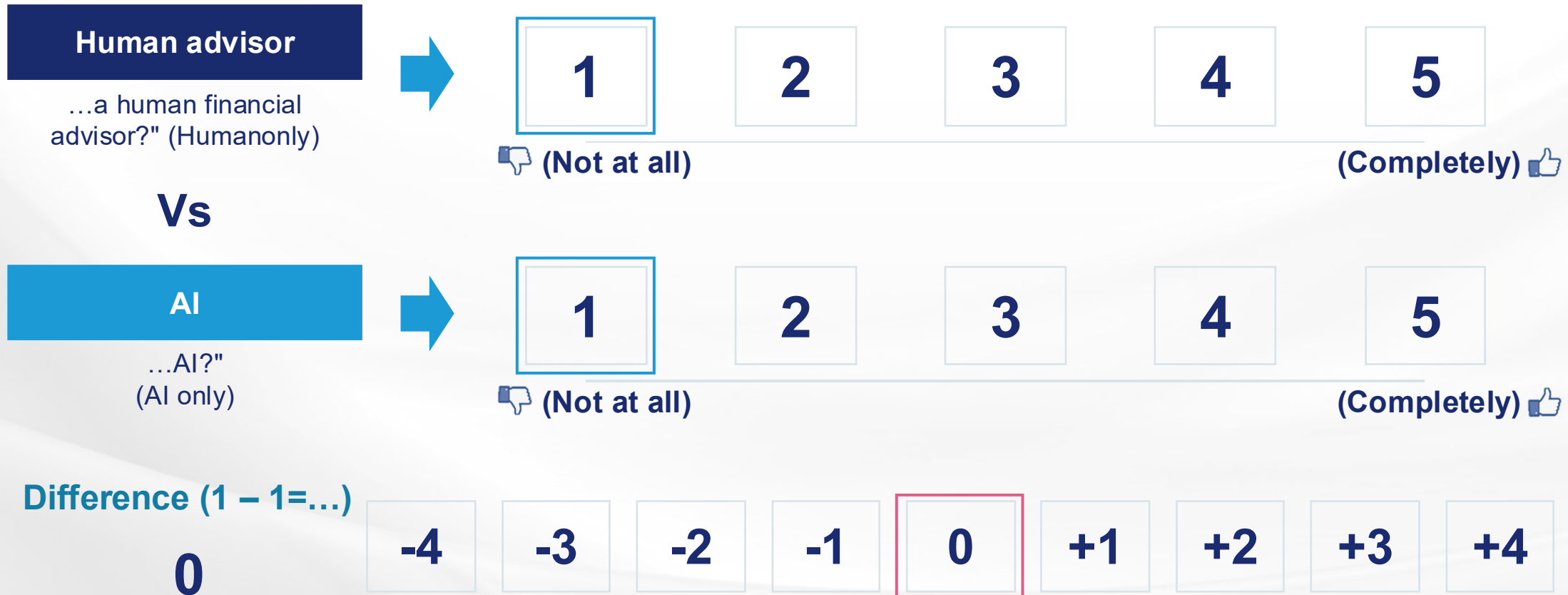
The role of AI at individual level

How comfortable do you feel receiving financial advice on your investment decisions from...
 (Intra-individual variation)



The role of AI at individual level

How comfortable do you feel receiving financial advice on your investment decisions from...
 (Intra-individual variation)



The role of AI at individual level

How comfortable do you feel receiving financial advice on your investment decisions from...
(Intra-individual variation)



The role of AI at individual level

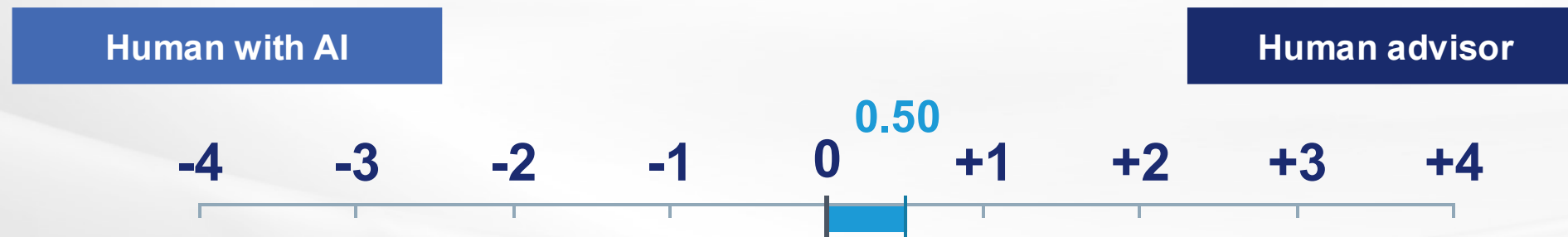
How comfortable do you feel receiving financial advice on your investment decisions from...
(Intra-individual variation)

...a human financial advisor who makes decisions with the support of AI?" (HumanwithAI)

Average
+0.50

▼	YES – Jobs requiring financial skills (-0.202*)
▲	YES – Long investment background (0.1945**)
▼	YES – Asset management service (-0.255*)
▲	YES – To have a financial advisor (0.2538**)
▼	YES – AI use frequency (-0.506***)

...a human financial advisor?" (Humanonly)





05

Humans Vs AI: Who gives the best advice?

1. Intro – Is AI just the “new Dr Google”?
2. Is AI (LLMs) reliable in giving financial recommendations?
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Same questions, blind review

GenAI tools vs a human expert, on three insurance cases:
life, health and auto

CASE TYPE: GOAL-BASED PLANNING (PROTECTION)

GenAI tools



Vs

Human Expert

Same questions...

(submitted to all – humans and AI)

... assessed according to specific quality evaluation criteria...

(Accuracy, Completeness, Responsiveness, Clarity, Professional judgement, Recency)

... with answers judged by all the LLM following a blind-review process

Life Insurance

Health Insurance

Auto Insurance

Life insurance: expert 3.94 Vs AI 3.80

CASE TYPE: GOAL-BASED
PLANNING (PROTECTION)

“Micah is 45, employed, unmarried, and has no dependents and no debts. A friend has started selling life insurance and wants Micah to talk to him. Should Micah buy life insurance? Why or why not?”

GenAI Tool	Accuracy	Completeness	Responsiveness	Clarity	Professional judgement	Recency	AVERAGE
 ChatGPT	4.39	4.54	4.86	4.37	4.11	4.45	4.45
 Gemini	3.74	4.33	4.83	4.49	4.29	4.26	4.32
 Deepseek	3.83	3.71	4.69	4.37	3.67	3.07	3.89
 Claude	2.97	2.58	3.42	3.70	2.58	2.08	2.89
 Copilot	4.00	3.60	4.60	4.60	3.80	3.40	4.00
 Perplexity	3.60	3.40	4.40	4.00	3.20	3.00	3.60
 Meta AI	3.40	3.20	4.00	4.00	3.20	2.80	3.43
AVERAGE	3.70	3.62	4.40	4.22	3.55	3.29	3.80
Human Expert	3.83	3.67	4.83	3.83	4.17	3.33	3.94

Rating on 1(=low) to 5(=high) scale

Health insurance: expert 4.42 Vs AI 4.03

CASE TYPE: GOAL-BASED
PLANNING (PROTECTION)

“Maria is 35 and self-employed. She’s looking for health insurance. She’s not eligible for Medicaid but is concerned about whether she can afford health insurance. She makes about \$35,000 a year. She’s generally healthy and has no chronic conditions. What health insurance would you recommend?”

GenAI Tool	Accuracy	Completeness	Responsiveness	Clarity	Professional judgement	Recency	AVERAGE
 ChatGPT	4.83	4.84	5.00	4.53	4.40	4.32	4.65
 Gemini	4.64	4.39	4.86	4.51	4.37	4.49	4.54
 Deepseek	4.06	3.80	4.71	4.39	3.79	3.47	4.04
 Claude	3.83	3.63	4.30	4.08	3.63	3.42	3.82
 Copilot	4.20	3.40	4.80	4.40	3.60	3.20	3.93
 Perplexity	3.53	3.42	4.50	4.20	3.17	2.83	3.61
 Meta AI	3.60	3.40	4.20	4.00	3.40	3.00	3.60
AVERAGE	4.10	3.84	4.62	4.30	3.77	3.53	4.03
Human Expert	4.83	3.83	4.67	4.50	4.67	4.00	4.42

Rating on 1(=low) to 5(=high) scale

Auto insurance: expert 4.64 Vs AI 4.08

CASE TYPE: GOAL-BASED
PLANNING (PROTECTION)

“Gabe is 22 years old. He drives a 2020 Honda Accord with 100,000 miles and no visible damage. He parks his car on the street outside is apartment in a St. Louis suburb. Gabe has a clean driving record. His credit score is 690 and he is employed full time. He’s unmarried and no one else drives his car. He’s looking for comprehensive, collision, and liability coverage. What policy do you recommend and what would it cost Gabe?”

	GenAI Tool	Accuracy	Completeness	Responsiveness	Clarity	Professional judgement	Recency	AVERAGE
	ChatGPT	4.84	4.37	5.00	4.83	4.41	3.75	4.53
	Gemini	4.80	4.21	4.86	4.67	4.53	3.33	4.40
	Deepseek	4.54	3.80	4.71	4.54	4.40	2.77	4.13
	Claude	4.25	3.87	4.67	4.28	4.08	2.83	4.00
	Copilot	4.80	4.00	5.00	4.80	4.60	2.80	4.33
	Perplexity	3.92	3.63	4.80	4.42	3.58	2.87	3.87
	MetaAI	3.60	2.80	4.00	3.80	3.20	2.20	3.27
	AVERAGE	4.39	3.81	4.72	4.48	4.12	2.94	4.08
	Human Expert	5.00	4.00	5.00	5.00	5.00	3.83	4.64

Rating on 1(=low) to 5(=high) scale

Where AI disrupts most – and why

AI is commoditising asset allocation, but inconsistently.
In goal-based planning, the human adviser still decides.

ASSET ALLOCATION High disruption, low reliability	
14 of 17	robo-advisers beaten by ChatGPT on portfolio recommendations (Oehler and Horn, 2024)
15–45%	equity weight recommended by different LLMs for the same investor profile (bonds: 40–75%)
15% Vs 30%	equities Deepseek gives the African American male profile, against the other two profiles: a bias risk
Disruption without accountability: it needs human oversight.	

GOAL-BASED PLANNING The human adviser remains decisive	
4–5%	the rule-of-thumb withdrawal rate LLMs converge on. Real plans depend on goals, family and long-term needs
3 of 3	insurance cases where the human expert beats the AI average: 3.94 vs 3.80 (life), 4.42 vs 4.03 (health), 4.64 vs 4.08 (auto)
5.00 Vs 4.12	professional judgement, human vs AI average (auto). Life: 4.17 vs 3.55. Health: 4.67 vs 3.77
Judgement and accountability stay with the adviser.	

Conclusions: Human + AI

Four questions, four answers – and one message

1

Is AI (LLMs) reliable in giving financial recommendations?

On average “yes”, but LLMs disagree: for the same investor profile, equity weights range from 15% to 45%, with signs of bias.

2

How much people really know about AI?

Only 60.7% identify a correct definition of AI. Knowledge of AI grows with income, wealth and financial literacy.

3

How much investors are prone to adopt AI in taking financial decisions?

“Not so much” for investment decisions: investors prefer a human adviser (3.79) to a human using AI (3.27) or AI alone (2.64). Some groups are more open-minded.

4

Humans Vs AI: who gives the best advice?

In protection planning (life, health and auto insurance), the human expert scores above the AI average in all three cases, most clearly on professional judgement.

**One message:
Human + AI**

AI is commoditising asset allocation, but inconsistently and with bias risk. Goal-based financial planning still requires human understanding, judgement and accountability. That is why Human + AI will outperform AI alone.