Who Uses AI in Financial Planning? Evidence from Survey Data

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Introduction

This preliminary study uses survey data to investigate the relationship between demographic, financial, and behavioral characteristics and the likelihood of AI adoption in financial planning. By applying statistical techniques, including correlation analysis and logistic regression, the research identifies the factors most strongly associated with the adoption of AI. The findings aim to contribute to the understanding of technology diffusion in financial planning and to provide insights for practitioners, educators, and policymakers seeking to encourage effective use of AI tools.

Artificial intelligence (AI) is transforming many aspects of the financial services industry, including investment management, risk assessment, and client relationship management (Kaluarachchi & Sedera, 2024; Mahalakshmi et al., 2022). In financial planning, AI-enabled tools offer the potential to enhance decision-making, improve efficiency, and provide more personalized recommendations (Addy et al., 2024; Onabowale, 2025). Despite these potential benefits, the rate and extent of AI adoption among individuals vary considerably. Understanding the factors that influence whether individuals choose to use AI tools in financial planning is therefore an important step in assessing the technology's role in the industry.

Method

Data and Variables

The data for this study were collected through an online survey administered via Microsoft Forms. Respondents were invited to voluntarily complete a questionnaire that covered demographic characteristics, financial situation, investment behavior, and self-reported AI adoption in financial planning.

The key outcome variable in this study is AI adoption, measured as whether respondents reported using artificial intelligence tools in financial planning. Independent variables include demographic characteristics such as age, gender, education level, and employment status, along with economic indicators such as household income and household net worth. The analysis also incorporates measures of financial knowledge, based on a composite score from four quiz questions, and risk tolerance, measured on an ordinal scale reflecting willingness to take investment risks. In addition, respondents reported the types of investments they hold, including stocks, exchange-traded funds, mutual funds, certificates of deposit, bonds, real estate, commodities, options or futures, cryptocurrencies, and other assets. Finally, the study accounts for ownership of different financial accounts, including brokerage accounts, retirement accounts, health savings accounts, custodial or joint accounts, and cryptocurrency wallets or exchanges. Table 1 provides a list of variables and their descriptions.

Methods of Analysis

The analysis proceeded in three steps. First, descriptive statistics were used to summarize demographic and financial characteristics of the sample. Second, bivariate correlations were computed between AI adoption and key variables, including demographic characteristics, financial knowledge, risk tolerance, investment types, and account types. These correlations offered preliminary insights into factors associated with AI adoption. Finally, a logistic regression analysis was conducted to identify predictors of AI adoption while controlling for other variables.

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Results

Table 2 provides an overview of the sample characteristics. A total of 155 respondents participated in the survey, including 27 AI users (17.4%) and 128 non-users (82.6%). The largest age group was 18–24 years (45.2%), followed by 25–34 years (32.3%), with smaller proportions in the 35–44 (14.8%) and 45–54 (7.7%) ranges. The sample consisted of 58.7% females and 41.3% males. Educational attainment was relatively high, with nearly 60% holding a bachelor's degree and an additional 9.7% reporting graduate or professional education. Most respondents were employed full-time (67.1%), while 14.2% were students, 11.6% worked part-time, 3.9% were unemployed, and 3.2% self-employed. Household income was widely distributed, with about 35% reporting income below $50,000 and 19.4% between $50,000 and $99,999. Similarly, household net worth was concentrated at the lower end, with 43.2% reporting under $50,000. The mean financial knowledge score was 3.01 (SD = 1.04). AI users scored higher on average (3.33) compared to non-users (2.95). Mean risk tolerance was 1.98 (SD = 1.10), with AI users again reporting higher scores (2.25) than non-users (1.91).

Bivariate correlations between AI adoption and survey variables are presented in Table 3. Age showed a small but significant negative correlation with AI adoption ($r = –0.16$, $p = 0.046$), indicating that younger respondents were more likely to adopt AI tools. Risk tolerance was positively correlated with AI adoption ($r = 0.14$), although this relationship was only marginally significant ($p = 0.088$). Among investment types, cryptocurrency ownership demonstrated the strongest positive association with AI adoption ($r = 0.25$, $p = 0.002$). There was also a positive but weaker correlation for individual stock ownership ($r = 0.15$, $p = 0.064$) and crypto wallet or exchange accounts ($r = 0.15$, $p = 0.066$), both approaching significance. Other variables, including gender, education, household income, net worth, financial knowledge, and other investment or account types, did not show significant relationships with AI adoption.

Logistic regression results for factors associated with AI adoption in financial planning are shown in Table 4. Among demographic and financial characteristics, risk tolerance was positively and significantly associated with AI adoption (Coef = 0.920, $p = 0.012$), indicating that individuals with higher risk tolerance were more likely to adopt AI tools. Employment status also mattered: self-employed individuals were significantly less likely to use AI compared to employed respondents (Coef = –2.546, $p = 0.043$). In terms of investment types, cryptocurrency ownership was strongly and positively related to AI adoption (Coef = 2.075, $p = 0.016$). No other investment or account type showed a statistically significant association with AI adoption. Age, gender, education, household income, household net worth, and financial knowledge were not significant predictors in the model.

Conclusions

This study examined the use of artificial intelligence in financial planning and the factors associated with its adoption. The findings show that only a minority of respondents currently use AI tools, yet meaningful patterns emerged among adopters. Individuals with higher risk tolerance were significantly more likely to use AI, suggesting that openness to financial risk aligns with openness to technological innovation. Similarly, cryptocurrency ownership was strongly associated with AI adoption, reflecting the link between interest in emerging digital assets and the adoption of advanced technologies. By contrast, self-employed respondents were significantly less likely to adopt AI than those employed full-time, indicating possible barriers related to resources or trust in AI applications.

Traditional demographic factors such as age, gender, education, income, and net worth were not significant predictors once other variables were considered, underscoring that behavioral and investment preferences may play a more decisive role than basic sociodemographic characteristics in shaping AI adoption. Overall, the results highlight that AI adoption in financial planning is still at an early stage, with adoption concentrated among individuals who are financially risk-tolerant and engaged with innovative investment products. These insights can inform financial professionals and technology developers seeking to better understand the profile of early AI adopters and identify areas where educational or trust-building efforts may expand future adoption.

References

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Table 1. Summary of survey variables

Variables	Descriptions
Age categories	Age category of the respondent (e.g., 18–29, 30–44, etc.)
Gender	Gender of the respondent
Education level	Highest level of education completed by the respondent
Employment status	Current employment status (e.g., employed, self-employed, unemployed, retired)
Household income	Approximate annual household income of the respondent
Household net worth	Approximate total net worth of the respondent's household
Financial knowledge score	Composite score measuring overall financial knowledge, calculated as the total number of correct answers across the four financial knowledge questions (range: 0 = no correct answers, 4 = all correct).
Risk tolerance level	Respondent's self-assessed investment risk tolerance
Investment types	Types of financial investments currently held by the respondent (e.g., stocks, bonds, real estate)
Account types	Types of investment accounts held by the respondent (e.g., brokerage, retirement)

Table 2. Demographic characteristics of survey respondents

Demographic	**Overall (N = 155)**	**AI users (n = 27)** (17.4%)	**Non-users (n = 128)** (82.6%)
Age categories			
18–24	70 (45.2%)	14 (51.9%)	56 (43.8%)
25–34	50 (32.3%)	7 (25.9%)	43 (33.6%)
35–44	23 (14.8%)	4 (14.8%)	19 (14.8%)
45–54	12 (7.7%)	2 (7.4%)	10 (7.8%)
Gender			
Female	91 (58.7%)	10 (37.0%)	81 (63.3%)
Male	64 (41.3%)	17 (63.0%)	47 (36.7%)
Education level			
High school	4 (2.6%)	0 (0%)	4 (3.1%)
Some college	27 (17.4%)	6 (22.2%)	21 (16.4%)
Associate	17 (11.0%)	3 (11.1%)	14 (10.9%)
Bachelor’s	92 (59.4%)	15 (55.6%)	77 (60.2%)
Graduate/professional	15 (9.7%)	3 (11.1%)	12 (9.4%)
Employment status			
Full-time	104 (67.1%)	16 (59.3%)	88 (68.8%)
Student	22 (14.2%)	5 (18.5%)	17 (13.3%)
Part-time	18 (11.6%)	5 (18.5%)	13 (10.2%)
Unemployed	6 (3.9%)	0 (0%)	6 (4.7%)
Self-employed	5 (3.2%)	1 (3.7%)	4 (3.1%)
Household income			
Under $50k	54 (34.8%)	11 (40.7%)	43 (33.6%)
$50k–$99,999	30 (19.4%)	7 (25.9%)	23 (18.0%)
$100k–$199,999	52 (33.5%)	5 (18.5%)	47 (36.7%)
$200k–$299,999	10 (6.5%)	2 (7.4%)	8 (6.3%)
$300k–$399,999	5 (3.2%)	2 (7.4%)	3 (2.3%)
$400k–$499,999	2 (1.3%)	0 (0%)	2 (1.6%)
$500k+	1 (0.6%)	0 (0%)	1 (0.8%)
Household net worth			
Under $50k	67 (43.2%)	12 (44.4%)	55 (42.9%)
$50k–$99,999	20 (12.9%)	3 (11.1%)	17 (13.3%)
$100k–$249,999	28 (18.1%)	2 (7.4%)	26 (20.3%)
$250k–$499,999	20 (12.9%)	5 (18.5%)	15 (11.7%)
$500k–$999,999	11 (7.1%)	2 (7.4%)	9 (7.0%)
$1,000,000+	9 (5.8%)	3 (11.1%)	6 (4.7%)
Financial knowledge score (0–4), mean (SD)	3.01 (1.1)	3.33 (0.6)	2.95 (1.2)
Risk tolerance level, mean (SD)	1.98 (1.1)	2.25 (1.1)	1.91 (1.1)

Table 3. Bivariate correlation results between AI adoption and survey variables

Variable	Correlation (r)	P-value
Age (as an ordinal scale)	-0.16	0.046
Gender (male = 1, female = 0)	0.07	0.395
Education level (as an ordinal scale)	0.05	0.518
Employment status		
Employed	0.05	0.543
Self-employed	-0.03	0.749
Unemployed	-0.04	0.638
Student	-0.01	0.889
Household Income (as an ordinal scale)	0.09	0.254
Household net worth (as an ordinal scale)	-0.05	0.536
Financial knowledge score (0-4)	0.05	0.548
Risk tolerance (as an ordinal scale)	0.14	0.088
Investment types		
Individual stocks	0.15	0.064
ETFs	0.05	0.540
Mutual funds	-0.03	0.730
Certificates of deposit (CDs)	-0.07	0.413
Bonds	-0.05	0.536
Real estate	0.06	0.45
Commodities (e.g., gold, oil)	-0.08	0.354
Options or futures	-0.09	0.281
Cryptocurrencies	0.25	0.002
Other	-0.11	0.198
None	-0.04	0.603
Account types		
Individual brokerage account	0.12	0.141
Roth IRA	0.05	0.518
Traditional IRA	-0.09	0.267
Employer retirement plan (401k/403b, etc.)	-0.03	0.686
Health savings account (HSA)	-0.04	0.621
Custodial or joint account	-0.12	0.147
Crypto wallet or exchange account	0.15	0.066
None	-0.01	0.932

Table 4. Logistic regression results for factors associated with AI adoption in financial planning

Variable	Coef	Std. Err.	P>|z|
Constant	-4.525	2.392	0.058
Age	-0.342	0.448	0.445
Gender (male=1)	-0.041	0.729	0.955
Education level	0.025	0.407	0.951
Employment status (ref. = employed)			
Self-employed	-2.546	1.259	0.043
Student	-0.297	1.309	0.820
Unemployed	-0.613	1.571	0.697
Household income	0.348	0.354	0.326
Household net worth	-0.106	0.288	0.712
Financial knowledge score	-0.014	0.306	0.963
Risk tolerance level	0.920	0.367	0.012
Investment types			
Individual stocks	0.301	0.932	0.746
ETFs	-0.040	0.908	0.965
Mutual funds	0.450	0.940	0.630
Certificates of deposit (CDs)	0.332	1.201	0.783
Bonds	1.248	1.047	0.233
Real estate	-0.335	0.821	0.684
Commodities (e.g., gold, oil)	-2.317	1.620	0.999
Options or futures	-1.127	1.583	0.476
Cryptocurrencies	2.075	0.864	0.016
Other	0.429	1.160	0.712
None	-1.077	1.144	0.346
Account types			
Individual brokerage	-0.054	0.880	0.951
Roth IRA	-0.893	0.904	0.323
Traditional IRA	-0.039	0.925	0.967
Employer retirement plan (401k/403b, etc.)	0.588	0.902	0.515
Health savings account (HSA)	-0.436	0.871	0.617
Custodial or joint account	-0.628	1.065	0.555
Crypto wallet or exchange	0.673	1.006	0.504
None	0.949	1.311	0.469