

THE IMPACT OF GenAI AND FINANCIAL FACTORS ON THE USAGE OF GenAI

¹Sathasivam A, ²Dr. S. Johnsi

¹Student, ²Supervisor

^{1,2}Firebird Institute of Research in Management, Coimbatore, India

Email: ¹sathasivam.a@firebird.net.in, ²johnsi.s@firebird.ac.in

Abstract: The rapid growth of Generative Artificial Intelligence (GenAI) has significantly influenced how individuals perform academic, professional, and financial tasks. However, adoption and usage of GenAI depend not only on technological capability but also on users' ethical trust and financial readiness. This study examines the combined impact of ethical trust factors — fairness, accountability, and transparency — and financial factors — financial well-being and financial behaviour — on the usage of GenAI. A quantitative, correlational research design was adopted, with primary data collected through a structured five-point Likert-scale questionnaire from 311 MBA students and young professionals in India. Descriptive statistics, Pearson correlation, and multiple regression were used to test five hypotheses linking the proposed factors to GenAI usage. The regression model was statistically significant ($F = 22.839$, $p < 0.001$, $R^2 = 0.272$), and the results reveal that transparency ($\beta = 0.271$, $p < 0.001$), financial well-being ($\beta = 0.225$, $p < 0.001$), and financial behaviour ($\beta = 0.113$, $p = 0.045$) significantly and positively predict GenAI usage, while fairness and accountability do not have a significant direct effect. The findings highlight the importance of clear, explainable AI systems and users' financial stability in driving GenAI adoption, offering practical insights for developers, educators, and policymakers seeking to promote responsible and financially inclusive GenAI usage.

Keywords — Generative Artificial Intelligence; Fairness; Accountability; Transparency; Financial Well-Being; Financial Behaviour; Technology Adoption

I. INTRODUCTION

Generative Artificial Intelligence (GenAI) tools such as ChatGPT and Gemini have rapidly become embedded in academic, professional, and personal financial tasks, offering capabilities ranging from content generation to financial analysis and decision support. Yet adoption of these tools is shaped by more than technical performance: it is also shaped by how much users trust the system ethically, and by their own financial circumstances [1].

Ethical trust in AI is commonly framed around three principles — fairness, accountability, and transparency (the FAT framework) — which determine whether users perceive an AI system as unbiased, responsibly governed, and explainable [2]. Separately, financial well-being and financial behaviour shape an individual's confidence, risk tolerance, and openness to adopting new digital tools, particularly those with financial or productivity applications. Most existing research treats the technical performance of AI or its ethical dimensions in isolation, with limited attention paid to how financial readiness interacts with ethical trust to jointly shape actual usage behaviour.

This study addresses that gap by examining the combined effect of fairness, accountability, transparency, financial well-being, and financial behaviour on the usage of GenAI among MBA students and young professionals in India — a population that is both digitally engaged and financially diverse. The specific objectives are to: (1) evaluate the influence of fairness, accountability, and transparency on GenAI usage; (2) measure the effect of financial well-being

and financial behaviour on GenAI usage; and (3) develop an integrated model combining ethical trust and financial dimensions to inform developers, educators, and policymakers seeking to promote responsible and inclusive GenAI adoption.

II. LITERATURE REVIEW

A. Fairness, Accountability, and Transparency

Fairness reflects the degree to which a GenAI system produces unbiased and equitable outcomes across users. Under the FAT framework, fairness has been identified as a strong predictor of cognitive trust in GenAI, ahead of both accountability and transparency [2]. Accountability concerns whether responsibility for AI errors and outcomes is clearly assigned, while transparency concerns how clearly a system explains its reasoning and output generation. Prior work suggests ethical dimensions such as fairness and accountability tend to shape user trust and perception more than they shape actual, observed usage behaviour [1], whereas transparency — being directly experienced during interaction — has a more consistent link to reduced uncertainty and greater user confidence in AI systems [4], [5].

B. Financial Well-Being and Financial Behaviour

Financial well-being reflects an individual's perceived financial security and confidence in meeting obligations, while financial behaviour captures actions such as budgeting, saving, and spending discipline. Individuals with greater financial stability and stronger financial habits are theorised to be more proactive and open to adopting digital tools that support productivity and financial planning, while financially strained users may view such tools as an unnecessary cost

rather than a benefit. Cost, affordability, and perceived financial benefit have similarly been shown to be practical drivers of technology adoption decisions more broadly.

C. Theoretical Framework

This study integrates three theoretical perspectives: the Fairness–Accountability–Transparency (FAT) framework, which explains ethical trust formation in AI systems [2]; Socio-Technical Systems Theory, which holds that users evaluate AI systems using social criteria similar to those used to judge other people; and Family Financial Socialization Theory (FFST), which links financial upbringing and habits to financial confidence and, by extension, openness to adopting new financially relevant technologies.

D. Hypotheses Development

Based on the reviewed literature, five hypotheses were formulated:

H1: Fairness has a significant and positive effect on the usage of GenAI.

H2: Accountability has a significant and positive effect on the usage of GenAI.

H3: Transparency has a significant and positive effect on the usage of GenAI.

H4: Financial well-being has a significant and positive effect on the usage of GenAI.

H5: Financial behaviour has a significant and positive effect on the usage of GenAI.

III. RESEARCH METHODOLOGY

A. Research Design

This study adopts a quantitative, descriptive, and correlational research design, appropriate for testing statistical relationships between ethical trust factors, financial factors, and the usage of GenAI.

B. Population and Sampling

The population comprises MBA students, academic users, and young professionals who actively use GenAI tools in India. A non-probability convenience sampling method was adopted due to time, cost, and accessibility constraints, and because no comprehensive sampling frame of GenAI users exists. A total of 311 valid responses were retained for analysis after data screening.

C. Instrument and Measurement

Data were collected using a structured questionnaire comprising three sections: (A) demographic information (age, gender, education, income); (B) independent variables — fairness, accountability, transparency, financial well-being, and financial behaviour, each measured with four or five items adapted from validated prior scales; and (C) the dependent variable, usage of GenAI, measured across five items covering

frequency, productivity, information processing, creativity, and overall satisfaction. All items in Sections B and C used a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

D. Data Collection Procedure

The questionnaire was distributed online via Google Forms, university networks, WhatsApp groups, and social media during the 2025–2026 academic year. Responses were screened for completeness and consistency before analysis; participation was voluntary and anonymous.

E. Statistical Techniques

Data were analysed in SPSS using descriptive statistics, Cronbach's Alpha reliability testing, Pearson correlation, and multiple linear regression (Enter method) to test the five hypotheses.

IV. RESULTS AND DISCUSSION

A. Demographic Profile

Table I summarises the demographic profile of the 311 respondents. The sample skews young (57.9% aged 20–30) and highly educated (85.2% undergraduate or postgraduate), consistent with a population that is both digitally engaged and an appropriate target for studying GenAI adoption.

TABLE I. DEMOGRAPHIC PROFILE OF RESPONDENTS (N = 311)

Category	Group	%
Age	20–25 years	38.3
	26–30 years	19.6
Gender	Male	53.7
	Female	46.0
Education	Postgraduate	43.7
	Undergraduate	41.5
Monthly Income	No income	31.5
	₹20,001–₹40,000	17.7

B. Descriptive Statistics

Table II presents descriptive statistics for all study variables. All variables recorded moderate mean scores (3.28–3.41 on a 5-point scale) with moderate variability, indicating generally positive but not extreme perceptions of ethical trust, financial readiness, and GenAI usage among respondents.

TABLE II. DESCRIPTIVE STATISTICS OF STUDY VARIABLES

Variable	N	Mean	SD
Fairness	311	3.281	0.828
Accountability	311	3.407	0.826
Transparency	311	3.344	0.872
Financial Well-Being	311	3.283	0.891
Financial Behaviour	311	3.374	0.823
Usage of GenAI	311	3.322	0.848

C. Correlation Analysis

Pearson correlation confirms a positive and statistically significant association between fairness and usage of GenAI ($r = 0.247$, $p < 0.001$), as shown in Table III, indicating that as perceived fairness increases, so does the reported likelihood of GenAI usage — though the regression results below show this bivariate relationship does not hold once other predictors are controlled for.

TABLE III. CORRELATION BETWEEN FAIRNESS AND USAGE OF GenAI

	Fairness	Usage of GenAI
Fairness	1	0.247**
Usage of GenAI	0.247**	1
Sig. (2-tailed)	—	< 0.001

D. Regression Analysis

Multiple regression (Enter method) was used to test the combined effect of fairness, accountability, transparency, financial well-being, and financial behaviour on GenAI usage. The model summary (Table IV) shows $R = 0.522$ and $R^2 = 0.272$, indicating the five predictors jointly explain approximately 27.2% of the variance in GenAI usage.

TABLE IV. REGRESSION MODEL SUMMARY

Model	R	R ²	Adj. R ²	SE
1	0.522	0.272	0.260	0.729

The ANOVA results (Table V) confirm the model is statistically significant ($F(5, 305) = 22.839$, $p < 0.001$), indicating a good overall model fit.

TABLE V. ANOVA

Model	SS	df	MS	F	Sig.
Regression	60.766	5	12.153	22.839	< .001
Residual	162.302	305	0.532	—	—
Total	223.068	310	—	—	—

The coefficients (Table VI) show that transparency ($\beta = 0.271$, $p < 0.001$), financial well-being ($\beta = 0.225$, $p < 0.001$), and financial behaviour ($\beta = 0.113$, $p = 0.045$) are significant positive predictors of GenAI usage, whereas fairness ($p = 0.463$) and accountability ($p = 0.219$) are not significant once the other variables are controlled for.

TABLE VI. REGRESSION COEFFICIENTS

Variable	B	Beta	t	Sig.
Constant	0.977	—	3.963	< .001
Fairness	0.041	0.040	0.735	0.463
Accountability	0.069	0.067	1.232	0.219
Transparency	0.264	0.271	4.687	< .001
Fin. Well-Being	0.214	0.225	4.065	< .001
Fin. Behaviour	0.116	0.113	2.011	0.045

E. Hypotheses Testing Summary

TABLE VII. SUMMARY OF HYPOTHESES TESTING

Hypothesis	Path	Result
H1	Fairness → Usage	Rejected
H2	Accountability → Usage	Rejected
H3	Transparency → Usage	Accepted
H4	Fin. Well-Being → Usage	Accepted
H5	Fin. Behaviour → Usage	Accepted

F. Discussion

The rejection of H1 and H2 suggests users largely assume fairness and accountability as built-in, default features of GenAI systems rather than actively evaluating them during use; users appear more focused on output quality and usefulness, and tend to attribute accountability to developers or platform providers rather than weighing it themselves [1], [5]. By contrast, the acceptance of H3 confirms transparency as the ethical factor most directly experienced by users: clearer, more explainable systems reduce the “black-box” perception of AI and build confidence, consistent with prior work on explainability and trust [4].

The acceptance of H4 and H5 confirms that financial readiness — both a stable financial position and disciplined financial habits — meaningfully supports GenAI adoption. Users who feel financially secure and manage money proactively appear more willing to explore GenAI as a productivity and decision-support tool, while financially strained users may view it as a lower priority. Taken together, the findings indicate that transparency and financial readiness, rather than fairness or accountability per se, are the strongest behavioural drivers of GenAI usage in this sample.

V. IMPLICATIONS OF THE STUDY

A. Theoretical Contributions

This study refines the applicability of the FAT framework at the behavioural level by showing that not all ethical dimensions equally predict usage: transparency emerges as the dominant ethical driver, while fairness and accountability shape trust more than observed behaviour. By integrating financial well-being and financial behaviour into the model, the study also connects GenAI adoption literature with financial decision-making theory, offering a more complete behavioural model of GenAI usage.

B. Practical Implications

AI Developers: should prioritise explainable outputs, clear system limitations, and transparent usage guidelines, since transparency is the ethical factor most strongly linked to usage.

Organisations and Educators: can improve adoption by demonstrating tangible productivity and financial benefits, and by supporting the financial readiness of target users.

Policymakers: should prioritise transparency standards for AI systems over accountability regulation alone, and support

financial literacy initiatives alongside AI literacy programmes to enable more inclusive adoption.

VI. LIMITATIONS AND FUTURE RESEARCH

A. Limitations

This study is subject to several limitations. The sample size, while adequate for multivariate analysis, limits generalisability beyond the studied population. The reliance on self-reported survey data introduces potential response bias. Only five predictors were examined, excluding other plausible factors such as perceived usefulness or social influence. Finally, the cross-sectional design captures a single point in time and cannot speak to how usage evolves.

B. Future Research

Future studies should extend this model with a larger and more geographically diverse sample, employ longitudinal designs to track changes in usage over time, incorporate mediating variables such as trust or perceived usefulness, and compare GenAI usage patterns across sectors such as education, finance, and healthcare.

VII. CONCLUSION

This study examined the combined impact of fairness, accountability, transparency, financial well-being, and financial behaviour on the usage of Generative Artificial Intelligence among 311 MBA students and young professionals in India. Multiple regression analysis revealed that transparency and financial factors significantly and positively predict GenAI usage, while fairness and accountability do not have a direct effect once other variables are controlled for. Grounded in the FAT framework, socio-technical systems theory, and Family Financial Socialization Theory, the study concludes that clear, explainable AI systems and users' financial stability are the strongest drivers of GenAI adoption — offering actionable guidance for developers, financial educators, and policymakers seeking to promote responsible and financially inclusive GenAI usage.

VIII. ACKNOWLEDGMENT

The author sincerely thanks Dr. S. Johnsi, Firebird Institute of Research in Management, for her continuous guidance and constructive feedback throughout this research, and is grateful to all respondents who generously shared their time and insights for this study.

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