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WHEN AI BECOMES A THINKING FRIEND: THE IMPACT OF EASE AND TRUST ON STUDENT DECISION MAKING

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Abstract

This study aims to examine the influence of ease of use, information quality, and trust in artificial intelligence (AI) on students' decision-making behavior as AI increasingly becomes a "thinking friend" in academic contexts. A quantitative method was used by distributing a Likert-scale questionnaire to university students who actively utilize AI tools for learning and everyday decision-making. The findings show that ease of use and trust in AI have a positive and significant effect on decision-making, indicating that students are more likely to rely on AI when they feel comfortable using it and believe in its reliability. However, information quality does not demonstrate a significant contribution to decision outcomes, implying that students prioritize usability and trust over the accuracy or depth of the information provided by AI. This study highlights the importance of the psychological acceptance process in technology-assisted cognitive behavior, contributing theoretically to the Technology Acceptance Model (TAM) in the context of AI-supported decisions. Practically, the results suggest that AI systems designed to be user-friendly and trustworthy can enhance students' confidence and effectiveness in making decisions.
Keywords: **AI usability, trust in AI, decision-making behavior, human–AI interaction**

Introduction

In the ever-evolving digital era, the use of artificial intelligence (AI) based technology is increasingly widespread, not only in industry and business, but also in students' daily lives. As a generation actively using digital devices and applications, students are likely faced with a variety of choices in their daily activities, from time management and selecting learning resources to lifestyle decisions. Therefore, understanding the factors that influence students' willingness and ability to use AI to assist with decision-making is highly relevant.

One important factor is ease of use. Based on the Technology Acceptance Model (TAM), the perception that a technology is easy to use significantly influences users' attitudes toward that technology and, in turn, their intentions and behaviors. In the context of AI among students, if AI technology is perceived as having an intuitive interface, easy to access, and requiring minimal effort to understand or operate, students are more likely to be open to using it to assist with daily decision-making, such as scheduling study sessions, prioritizing assignments, or searching for

references. Recent research also confirms that perceived ease of use influences students' attitudes toward the use of AI tools.

The second factor is the quality of information generated or provided by AI systems. Students rely heavily on timely, relevant, accurate, and understandable information in their daily decision-making. If an AI system provides only raw data or incomprehensible or unreliable results, its benefits will be diminished. Literature research indicates that information quality is a critical element in the acceptance of information technology, as users evaluate whether the system provides added value and reliability in the context of their tasks. When students perceive that AI is capable of presenting information that meets standards of clarity, relevance, and accuracy, their trust in the system is likely to increase and encourage further use.

A third equally important factor is trust in AI technology. Trust encompasses the belief that AI systems will function correctly, safely and reliably without compromising privacy or introducing harmful bias. In the technology acceptance literature, trust has been identified as a crucial variable that moderates and mediates the relationship between ease of use, perceived usefulness, and usage intention. In the AI realm, research shows that trust in AI systems is influenced not only by ease of use and perceived usefulness, but also by external factors such as algorithm transparency, data security, and the reputation of the service provider. In the context of students who tend to be critical and have diverse digital literacy, building trust in AI is crucial for this technology to be truly accepted and used in everyday decision-making processes.

When these three factors ease of use, information quality, and trust—interact, a mechanism is formed that encourages students to use AI as a decision-making tool. Ease of use drives initial acceptance, information quality ensures the practical value of the AI system's output, and trust ensures students' willingness to rely on the AI system in real-world situations. As a result, AI use in everyday activities such as selecting learning methods, scheduling activities, or obtaining feedback can increase, ultimately supporting the efficiency, effectiveness and quality of students' decisions.

Therefore, research on the influence of ease of use, information quality, and trust in AI in assisting students in everyday decision-making is not only theoretically relevant but also practically important. This has implications for developers of AI applications in educational settings, higher education institutions that provide AI-based services, and students as end-users who need to be equipped with digital literacy and an understanding of the risks and benefits of AI. This research is expected to contribute to a deeper understanding of the factors that influence the acceptance and use of AI in students' lives and how the interaction between these factors shapes technology use decisions.

Theoretical Framework

The development of artificial intelligence (AI) technology has had a significant impact on helping students make everyday decisions. In the context of higher education, students are often faced with various choices, such as determining study strategies, managing time, and selecting appropriate academic references. AI is a tool capable of processing information quickly and providing data-driven recommendations.

However, the effectiveness of AI in supporting student decision-making is greatly influenced by several factors, including ease of use, information quality and trust in AI.

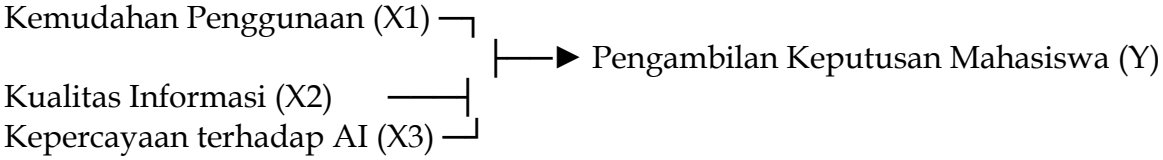
Ease of use describes the extent to which students perceive an AI system to be easy to understand and operate without requiring much effort. Based on the Technology Acceptance Model (TAM) developed by Davis (1989), perceived ease of use directly influences a person's acceptance and intention to use technology. The easier a system is to use, the more likely students are to adopt AI in daily activities, such as searching for academic references or making quick decisions. Several studies, such as those conducted by Alalwan et al. (2021), show that ease of use positively influences users' decisions to utilize technology based systems.

Furthermore, information quality plays a crucial role in the effectiveness of AI use. Based on DeLone & McLean's (2003) model of information system success, information quality is measured by accuracy, relevance, completeness and timeliness. If AI can provide accurate and relevant information, students will feel more confident in making decisions based on the system's recommendations. Research by Pratama and Ariyanti (2023) also found that the higher the quality of information produced by a system, the more rational and effective decisions users make.

Furthermore, trust in AI is a key factor in determining how much students rely on the technology. According to McGrath et al. (2025), trust in AI encompasses the belief that the system is reliable, secure and has integrity in providing objective results. Without trust, students tend to hesitate to follow AI recommendations, even if the information is high-quality. Research by Wang et al. (2024) found that trust in AI significantly influences willingness to rely on AI for decision-making.

These three variables are interrelated and contribute to increasing the effectiveness of student decision-making (Y). According to Ahmad et al. (2023), the judicious use of AI can accelerate the thinking process, expand alternative solutions, and reduce subjective bias in decision-making. Therefore, if students experience ease of use, obtain quality information and have high trust in AI, AI will play an increasingly important role in helping them make informed decisions in their daily lives.

Framework:



Hypothesis:

H1: Ease of use of AI has a positive and significant effect on student decision-making.

H2: The quality of AI information has a positive and significant effect on student decision-making.

H3: Trust in AI has a positive and significant effect on student decision-making.

H4: Ease of use, information quality, and trust in AI simultaneously have a positive and significant effect on student decision-making.

Method

This study used a quantitative approach to determine the influence of ease of use, information quality, and trust on students' tendency to make daily decisions with the help of artificial intelligence (AI). Data were collected through questionnaires distributed to 111 respondents, who were active students who had used AI services such as ChatGPT, Gemini, or Copilot in their academic and personal activities. The data collection technique used was a questionnaire with a five-point Likert scale, where each statement had answer options ranging from 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), to 5 (Strongly Agree).

The research instrument consisted of four main variables: ease of use of AI (X1), quality of AI information (X2), trust in AI (X3), and student decision-making (Y). Each variable was measured through several statement indicators developed based on theory and previous research. Before use, the instrument was tested for validity and reliability to ensure that each item measured the intended variable consistently and accurately.

The collected data were analyzed using a statistical approach with the aid of SPSS software. The analysis stages included validity testing, reliability testing, descriptive analysis to describe respondent characteristics and response trends, classical assumption tests (normality, multicollinearity, and heteroscedasticity), and multiple linear regression analysis to determine the influence of ease of use, quality of information, and trust in AI on student decision-making. The analysis results were then interpreted to answer the research hypotheses and provide an overview of the role of AI in helping students make more rational and efficient decisions.

Results

Tabel 1. Partial T-Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,365	1,417		-,258	,797
	ease ai	,262	,077	,207	3,393	,001
	information quality ai	,121	,097	,105	1,256	,212
	trust in ai	,648	,078	,649	8,288	,000

a. Dependent Variable: student decision making

Based on the results of the t-test, the AI ease of use variable has a positive and significant effect on students' decision-making, with a significance value of 0.001 (< 0.05) and a coefficient of 0.262. This indicates that the easier AI is to use, the better students' decision-making ability. The AI information quality variable has a significance value of 0.212 (> 0.05), meaning it does not have a significant effect, although the direction of the influence is positive. Meanwhile, trust in AI has a positive and significant effect with a significance value of 0.000 and a coefficient of

0.648. Therefore, AI ease of use and trust in AI have a positive and significant effect on students' decision-making, while AI information quality does not have a significant effect.

Table 2. Simultaneous F Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1222,519	3	407,506	91,804	,000[b]
	Residual	474,959	107	4,439		
	Total	1697,477	110			

a. Dependent Variable: student decision making

b. Predictors: (Constant), trust in ai, ease ai, information quality ai

Based on the results of the F-test (ANOVA) in the table above, the calculated F value is 91.804 with a significance value of 0.000 (< 0.05). This indicates that the regression model used is feasible and simultaneously significant, meaning that the variables AI ease of use, AI information quality, and trust in AI together have a significant effect on students' decision-making. Therefore, these three independent variables are able to significantly explain the variation in students' decision-making ability.

Coefficient of Determination Test

Tabel 3. Coefficient of Determination Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.849[a]	.720	.712	2.107	.720	91.804	3	107	.000	2.110

a. Predictors: (Constant), Trust in AI, Ease ai, Information quality ai

b. Dependent Variable: Student decision making

In presenting the results, tables and figures must be numbered consecutively according to their appearance in the text. The title of each table should be placed above the table and centered. Conversely, the title of each figure should be written below the figure and centered. All tables and figures must be referenced in the text to ensure consistency between the description and the data presented.

Multiple Regression

Tabel 4. Multiple Regression

Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Correlations	Collinearity Statistics

		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.365	1.417		-.258	.797					
	ease ai	.262	.077	.207	3.393	.001	.548	.312	.173	.702	1.424
	information quality ai	.121	.097	.105	1.256	.212	.709	.121	.064	.371	2.695
	trust in ai	.648	.078	.649	8.288	.000	.819	.625	.424	.426	2.346
a. Dependent Variable: student decision making											

Based on the results of the multiple regression analysis, it can be concluded that the variables AI ease of use and trust in AI have a positive and significant effect on students' decision-making ability, with significance values of 0.001 and 0.000 respectively (< 0.05). This means that the easier AI is to use and the higher the students' trust in AI, the better their decision-making ability. Meanwhile, the AI information quality variable does not have a significant effect, as its significance value is 0.212 (> 0.05). The VIF values (< 10) and Tolerance values (> 0.1) indicate that there is no multicollinearity. Therefore, ease of use and trust in AI are the most influential factors in improving students' decision-making abilities.

Table 5. Simple Linear Regression Test of X1 on Y

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,651	2,103		2,211	,029
	ease ai	,693	,101	,548	6,843	,000

a. Dependent Variable: student decision making

Based on the results of the simple linear regression analysis, the equation obtained is $Y = 4.651 + 0.693X$, indicating that AI ease of use (ease AI) has a positive effect on student decision-making. The coefficient value of 0.693 means that every one-unit increase in AI ease of use will increase student decision-making by 0.693 units. The *t*-value of 6.843 with a significance level of 0.000 (< 0.05) shows that this effect is statistically significant. Thus, the easier the AI is to use, the better students' decision-making ability becomes.

Table 6. Simple Linear Regression Test of X2 on Y

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	3,689	1,470		2,510	,014
	information quality ai	,817	,078	,709	10,507	,000

a. Dependent Variable: student decision making

Based on the results of the simple linear regression analysis, the equation obtained is $Y = 3.689 + 0.817X$, indicating that AI information quality has a positive effect on student decision-making. The coefficient value of 0.817 means that every one-unit increase in AI information quality will increase student decision-making by 0.817 units. With a *t*-value of 10.507 and a significance level of 0.000 (< 0.05), it can be concluded that the effect is statistically significant. This means that the higher the quality of information provided by AI, the better the students' decision-making ability.

Table 7. Simple Linear Regression Test of X3 on Y

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4,220	1,006		4,197	,000
	trust at	,818	,055	,819	14,926	,000

a. Dependent Variable: student decision making

Based on the results of the simple linear regression analysis shown in the *Coefficients* table, the regression equation obtained is $Y = 4.220 + 0.818X$, indicating that trust in AI has a positive effect on student decision-making. The constant value of 4.220 shows that when trust in AI is zero, the baseline level of student decision-making is 4.220. Meanwhile, the regression coefficient of 0.818 indicates that every one-unit increase in trust in AI will increase student decision-making by 0.818 units. The *t*-value of 14.926 with a significance level of 0.000 (< 0.05) shows that this effect is statistically significant. Thus, it can be concluded that the higher the level of students' trust in AI, the better their decision-making ability.

Discussion

The results of this study demonstrate that ease of use and trust in artificial intelligence significantly influence students' decision-making, while information quality does not show a significant effect. These findings are aligned with the research objective of examining how AI can function as a "thinking partner" for students in making everyday decisions. In line with the Technology Acceptance Model (TAM), perceived ease of use plays a role in enhancing user interaction and system adoption, which in turn contributes to better decision outcomes. Meanwhile, the strong effect of trust reinforces previous findings asserting that confidence in AI reliability is a crucial prerequisite for technology-assisted decision-making.

However, the insignificance of information quality shows that students may rely more on intuitive and experiential factors rather than evaluating the depth of accuracy or relevance of the information provided by AI. This finding contrasts with certain prior studies highlighting information quality as a determinant of trust and effective usage.

It suggests a shift where usability and perceived reliability overshadow content assessment, especially for users already familiar with AI tools.
Scientifically, this research contributes to the growing body of literature on human–AI collaboration and cognitive augmentation, providing empirical evidence that psychological acceptance factors remain dominant in shaping decision behavior. Practically, the findings underline the need for developers and educational institutions to prioritize user-centered design and trust-building mechanisms, such as transparency and data security, to maximize AI's role in improving students' decision effectiveness.
Nevertheless, this study has limitations regarding the number and characteristics of respondents and the limited scope of variables measured. Despite this, the contribution remains significant as the model explains 72% of the variance in student decision-making, highlighting the relevance of usability and trust as the core determinants in AI-supported decision processes.
User experience and psychological trust in shaping decision quality. Practically, these findings suggest that educators and developers should focus on improving AI interfaces and fostering trust-building features such as transparency and ethical design to enhance students' decision-making competence.
Nevertheless, this study has several limitations. The research was limited to 111 student respondents, and the variables only explained 72% of decision-making behavior. Future studies should incorporate additional factors such as motivation, critical thinking, or prior AI experience to provide a more comprehensive understanding of how AI supports human cognition and decision-making processes.

Conclusion

This study concludes that ease of use and trust in artificial intelligence significantly and positively influence students' decision-making abilities, while the quality of AI information does not show a significant effect. These findings indicate that usability and psychological trust play a crucial role in shaping students' willingness to rely on AI as a cognitive partner in both academic and everyday contexts.
Academically, this study contributes to the development of human–AI interaction research by reinforcing the Technology Acceptance Model (TAM), particularly in the domain of technology-supported cognitive decision-making. Practically, the results highlight the importance of designing AI systems that are intuitive, transparent, and capable of building user trust in order to improve the effectiveness and confidence of students' decisions.
Although this study demonstrates a strong model explaining 72% of the variance in decision-making, it recognizes limitations regarding the number of respondents and the scope of variables examined. Nevertheless, the contribution remains substantial in enhancing the understanding of how AI supports human decision-making behavior.

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