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# The influence of artificial intelligence in product recommendation systems and brand value on consumer purchase intention on marketplace E-commerce platforms

Narudom Torthienchai<sup>1\*</sup>, Kawin Chuaikaew<sup>2</sup>

<sup>1,2</sup>Business School, University of Thai Chamber of Commerce, Thailand.

Corresponding author: Narudom Torthienchai (Email: narudom tor@utcc.ac.th)

#### **Abstract**

This study investigates the influence of artificial intelligence on consumer purchase intentions on marketplace e-commerce platforms. The objective is to examine the relationship between AI marketing and brand equity influencing consumer purchase intentions. This study, conducted quantitatively with 400 consumers who have purchased on marketplace e-commerce platforms, investigated the relationship between AI marketing and brand equity influencing consumer purchase intentions. The study involved a quantitative study with a sample of 400 consumers who had experience shopping on marketplace e-commerce platforms. The results suggest that AI alone may not drive purchase decisions if consumers lack trust in a brand's products. In particular, brand equity, which encompasses brand awareness, brand association, perceived quality, and brand loyalty, remains a key factor influencing consumer purchase intentions. This study suggests that digital marketers should prioritize building brand trust alongside the use of AI to meet consumer needs. Future research should explore alternative e-commerce platforms, such as live commerce and social commerce, as well as additional variables related to changing consumer behavior.

Keywords: Artificial intelligence marketing, Brand equity, Perceived quality, Purchase intention.

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**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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#### 1. Introduction

In the digital age, consumer behavior is changing rapidly, especially in the context of e-commerce platforms, which are channels through which consumers can access products and services conveniently, quickly, and in a variety of ways. The key factors that influence purchasing decisions on these platforms are not only the products themselves, but also the intelligent systems that enhance the consumer purchasing experience. In the behavior of usage, Insight ERA [1] mentioned

the behavior of the Thai population in using the internet in 2024, it was found that there were 63.21 million people or 88 percent of the total population of 71.85 million people, which was an increase of 0.1 percent from 2023. However, the usage time was less than the previous year. It was found that in 2024, the average usage time was 7 hours and 58 minutes, 7 minutes or 1.6 percent less than the previous year. The factors that influenced the stimulation of the Thai population's purchasing demand on the e-commerce system were coupons at 54.0 percent, free shipping at 51.8 percent, and cash on delivery at 40.4 percent, respectively. The path to finding products came from searching up to 51.1 percent. Currently technological development has led to the use of artificial intelligence (AI) systems, which National University [2] said that artificial intelligence will become an important foundation for the foundation of innovation that affects industrial changes and lifestyles. The survey found that organizations use AI to provide services to customers at 56 percent. In terms of businesses on the e-commerce system, Bangkok Business News Agency [3] mentioned that the behavior of purchasing products on the e-commerce system in 2024 expanded by 14 percent, with a total value of 1.1 trillion baht, which is higher than in 2023, which was only worth 980 billion baht. In the e-commerce market in the ASEAN region, Thailand is the second largest after India. This is consistent with data from the Department of Business Development [4] stating that the number of legal entity registrations of business groups on the e-commerce system from January to November 2024 was 2,283, an increase of 365 or 19.03 percent from the same period of the previous year. In terms of registered capital, it is worth 3,979.90 million baht, an increase of 23.42 percent from the same period of the previous year.

#### 2. Literature Review

#### 2.1. Artificial Intelligence Marketing

Keegan, et al. [5] mentioned the use of artificial intelligence in marketing as a technology used in customer segmentation, generating sales opportunities by creating content to send to target customers quickly, interacting with customers to provide information based on inquiries to create satisfaction, and predicting future trends accurately based on past data. The study found that although AI can improve marketing practices, the results are different because the needs of target customers are different. This is consistent with Keegan, et al. [5] who mentioned the use of artificial intelligence in marketing as a technology used in customer segmentation, generating sales opportunities by creating content to send to target customers quickly, interacting with customers to provide information based on inquiries to create satisfaction, and predicting future trends accurately based on past data. The study found that although AI can improve marketing practices, the results are different because the needs of target customers are different. This is consistent with Kotha [6] who mentioned AI in digital marketing as a tool that helps businesses understand their customers better. By leveraging internet data to learn about customer behavior across channels, brands can make more informed marketing decisions. The study examined the alignment of traditional marketing and AI to enhance customer insights. The mixed-method study included qualitative data from a sample of 75 organizations across 12 distinct industries and quantitative data from 127 retailers to gain insights into customer insights and adjust marketing strategies. The study highlights the importance of preparing for emerging technologies and developing collaborative models, with an emphasis on skills development, with an increase in AI literacy requirements of 178%, and strategic agility, with a 234% improvement in predictive accuracy. In other words, future marketing success will depend on organizations' ability to develop sophisticated frameworks that leverage AI's capabilities to capture, analyze, and deliver actionable insights. For organizations looking to leverage the complementary strengths of AI and humans in their marketing efforts.

## 2.2. Brand Equity

Keller [7] mentioned that brand equity is the value that customers perceive and express through actions that come from feelings towards the products or services offered by the brand, which results in the brand being stronger and more outstanding than competing brands. It also results in customers having significant purchase intentions. Brand equity consists of the following components: brand awareness, which is the behavior of customers perceiving the brand; brand association; and emotional connection with the brand (brand association), which is the thoughts and feelings that people have when thinking about the brand. For example, when people think of Nike, they may think of sports and athletes. Perceived quality is the perception of the quality of products or services, and brand loyalty is the customer's repeat purchases. Louvet [8] study examined the impact of brand equity on millennials' decisions to purchase sports nutrition products in Ireland. The study was conducted with a sample of 102 millennials living in Ireland who use millennial sports nutrition products, aged 26 to 41 years. It was found that brand equity significantly affects purchase intention. Brands that can create value for customers can strengthen their brand to be distinctive and different from competitors. In addition, increasing brand equity affects the pricing relationship, resulting in more profit for the brand. The results of the study are consistent with Kurt and Kara [9] who stated that brand equity is the value that a brand adds to a product or service. It is a measure of brand strength in the market based on consumer perception, experience, and relationship with the brand. This value can influence consumer behavior, including willingness to pay a premium price for branded products. The components are brand association, which is the customer's perception of the brand, and brand awareness, which refers to how easily consumers perceive the brand. Perceived quality is the consumer's perception of the overall quality or superiority of the product. And brand loyalty is the consumer's commitment to repurchase or continue using the brand. In a study on the impact of conspicuous consumption and brand equity on purchase intention of premium brand products with a sample of 426 people, it was found that brand equity affects positive customer behavior, leading to increased brand liking and interest, purchase willingness, and customer loyalty due to trust and perceived high quality. This is consistent with Lusianti, et al. [10] who stated that brand equity is the value that a brand adds to a product, including perceived loyalty, perceived quality, and strong brand equity relationships leading to trust and competitive advantage. In a study on trust

affecting brand equity with a sample of 449 people, the results of the study found that when consumers perceive brand equity, they are more likely to trust the brand and create a positive relationship between customers and the brand.

#### 2.3. Brand Trust

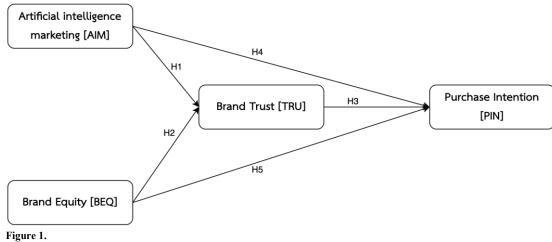
Barfi, et al. [11] stated that trust reduces uncertainty and risk for consumers when choosing products or services. It is the fact that the brand can meet customer needs according to its promise, which is important in influencing consumer decisions. From a study on the influence of brand equity on brand trust in the development of brand reputation and social media adaptation, it was found that the brand equity that customers may perceive from brand reputation significantly affects trust. This is consistent with the results of the study by Liu-Thompkins, et al. [12] who mentioned trust as an important element in customer-organization relationships, especially in AI-enabled interactions. When customers perceive that AI systems can meet their needs, it will result in increased customer trust. Trust is also linked to the emotional and social dimensions of customer experience, which are enhanced by AI empathy, which can lead to trust in organizations. This is in line with Qotrunnada and Aprilianty [13] study of the influence of customer trust on the acceptance of marketing emails and purchase intentions of paid online short courses. They mentioned that trust is an important factor in building relationships between customers and brands that arise from a sense of security that the brand will meet customer needs with honesty. The research found that customer trust significantly affects the acceptance of marketing emails.

#### 2.4. Purchase Intention

And finally, purchase intention. Yin and Qiu [14] mentioned purchase intention, which means the possibility that consumers will buy a product or service in the future. Factors affecting purchase intention include brand equity perception from consumer questions. By studying artificial intelligence technology and online purchase intention, it was found that artificial intelligence technology in online sales channels positively affects consumer experience in terms of brand equity perception, which is a factor in increasing consumer purchase intention in online channels. This is consistent with Andharini and Satiti [15] who mentioned purchase intention as the possibility that customers will buy a product or service. It reflects the customer's readiness to buy according to various influencing factors. By studying the influence of celebrities on purchase intention through the Shopee application with brand trust as a mediating variable, it was found that celebrities that customers follow significantly affect purchase intention. When customers see celebrities they follow mentioning a product or service positively, it will increase their desire for the product or service on the Shopee application. The study showed that celebrity endorsers significantly affect purchase intentions. When consumers see celebrities promoting a product, it can increase their desire to purchase that product via the Shopee application, which is consistent with Qotrunnada and Aprilianty [13] who stated that purchase intention is the likelihood that a customer will purchase a product or service. Customer purchase intention is an important concept in marketing because it helps brands understand what factors customers are likely to consider when making a purchase. A study on the influence of customer trust on the acceptance of marketing emails and the purchase intention of online paid short courses found that trust significantly influences customer purchase intentions. When customers trust a brand, they are more likely to consider buying from it.

## 2.5. Theoretical Framework and Hypothesis Development

- $H_{l:}$  The Impact of Artificial Intelligence Marketing on Consumer Brand Trust in Products on E-Commerce Marketplaces.
  - H2. The Impact of Brand Equity on Consumer Brand Trust in Products on E-Commerce Marketplaces.
  - H<sub>3</sub>: The Impact of Brand Trust on Consumers' Purchase Intention in Products on E-Commerce Marketplaces.
- $H_4$ : The Impact of Artificial Intelligence Marketing on Consumers' Purchase Intention in Products on E-Commerce Marketplaces.
- *H*<sub>5</sub>: The Impact of Brand Equity on Consumers' Purchase Intention in Products on E-Commerce Marketplaces. All hypotheses as shown in Figure 1.



The research framework.

## 3. Methodology and Methods

The target population is consumers in Thailand who have experience purchasing products from e-commerce marketplaces. in Thailand. It was calculated based on Yamane [16] cited in Prasitratsin [17]). The confidence level was set at 95 percent, referring to the population in Thailand from the National Statistical Office data on the population data classified by migration status, age group, gender, region, province, and administrative area for the years 2021-2023 (NSO surveys annually) published on September 27, 2024, showing the Thai population to be 70,091,186 people. From the sample size calculation, it was found that there were 399.997 samples, or approximately 400 people, in the research group.

The instrument used to collect data was an online questionnaire, which was developed from a literature review. The questionnaire was designed in an online format that specified screening questions for the sample group to obtain data from participants with appropriate qualifications as specified by the researcher. Reliability was assessed by conducting a pilot test of 30 participants via an online questionnaire and disseminating the questionnaire on social media to check the Cronbach's alpha coefficient to ensure it was more than 0.7.

The questionnaire was designed through a literature review and validated by 5 experts. The Index of Item-Objective Congruence (IOC) was required to be greater than 0.6, and the results of the validation showed that the questionnaire had an IOC of 0.98. The reliability of the questionnaire was assessed by analyzing Cronbach's alpha coefficient, which was required to be greater than 0.7. The pilot test, conducted with 40 sets, showed that the questions had values ranging from 0.705 to 0.740. Therefore, it can be concluded that the research instrument in this study is reliable and valid, consistent with the research objectives. This research was approved by the Research Review Board (IRB), number A01034/2025. From the School of Business, University of the Thai Chamber of Commerce, Thailand.

This study will use descriptive statistics to describe data or results from collecting questionnaires or surveys by using statistics of frequency and percentage. In addition, the average  $(\overline{X})$  and standard deviation (SD) are used to measure the level of variable data, including marketing communication, motivation, attitude, and purchasing decision. The average scores are as follows:

- 4.21-5.00 means the level of opinion is at the highest level.
- 3.41-4.20 means the level of opinion is at a high level.
- 2.61-3.40 means the level of opinion is at a moderate level.
- 1.81-2.60 means the level of opinion is at a low level.
- 1.00-1.80 means the level of opinion is at the lowest level.

After that, confirmatory factor analysis (CFA) will be conducted before conducting the structural equation modeling analysis (SEM).

#### 4. Results

# 4.1. Respondent Profile

From the first table, it was found that most of the sample group were female, with 214 persons, or 53.5 percent, and male, with 186 persons, or 46.5 percent. In terms of age, it was found that most of the sample group were 21-30 years old, numbering 272 persons, or 68 percent. Next, 102 persons were under 20 years old, or 25.5 percent. Next, in the age group of 31-40 years old, there were 17 persons, or 4.25 percent, and those 40 years old or over, numbered 9 persons, or 2.25 percent, respectively. In terms of education, it was found that most of the sample group held a bachelor's degree, with 331 persons, or 82.75 percent. Next, 64 persons, or 16.0 percent, had a master's degree, and 5 persons, or 1.25 percent, had a doctoral degree. In terms of income, it was found that the majority of the sample group had an income of less than or equal to 15,000 baht, amounting to 235 persons, or 58.75 percent, followed by those with 15,001-30,000 baht, totaling 143 cases, or 35.75 percent, followed by those with 30,001-45,000 baht and 45,001-60,000 baht, each with 8 cases, or 2.00 percent, and those with 60,000 baht or more, with 6 cases, or 1.50 percent, respectively, as shown in Table 1.

**Table 1**. Respondent Profile.

(n = 400)	Statistics	Count	Mean
Gender	Man	186	0.4650
	Women	214	0.5350
Age	Under 20 years old	102	0.2550
	21 - 30 years old	272	0.6800
	31 - 40 years old	17	0.0425
	Over 40 years old	9	0.0225
Education	Below bachelor's degree	64	0.1600
	Bachelor's degree	331	0.8275
	Higher than bachelor's degree	5	0.0125
Income	Less than 15,000 Bath	235	0.5875
	15,001 – 30,000 Bath	143	0.3575
	30,001 – 45,000 Bath	8	0.0200
	45,001 - 60,000 Bath	8	0.0200
	More than 60,000 Bath	6	0.0150

#### 4.2. Descriptive Analysis

The primary variables all demonstrated high mean scores  $(\overline{X})$ , suggesting a positive inclination of respondents toward the constructs under investigation. Notably, Brand Trust exhibited the highest mean  $(\overline{X} = 3.98, SD = 0.638)$ , emphasizing the importance of consumer trust within the online shopping environment. Artificial intelligence marketing presented a mean of 3.96 (SD = 0.381), with its sub-dimensions—Accuracy Experience  $(\overline{X} = 3.98, SD = 0.605)$ , Insight Experience  $(\overline{X} = 3.97, SD = 0.738)$ , and Interactive Experience  $(\overline{X} = 3.95, SD = 0.550)$  also yielding high mean values. Brand Equity showed a mean of 3.87 (SD = 0.541), with Perceived Quality displaying the highest mean  $(\overline{X} = 3.93, SD = 0.761)$  among its constituent dimensions. Purchase Intention also revealed a high mean.  $(\overline{X} = 3.98, SD = 0.810)$ 

The skewness and kurtosis values indicate that the data distribution approximates normality. Skewness values ranged from -0.355 to -0.0157, while kurtosis values ranged from -0.512 to 0.421. These findings suggest that the data does not significantly deviate from a normal distribution, thereby satisfying a key assumption for subsequent Structural Equation Modeling (SEM), as shown in Table 2.

Table 2.

	wness and Kurtosis Analysis.	N.T.	3.6	C.D.	CI	TZ 4 *
Variables	Observable variables	N	Mean	S.D.	Skewness	Kurtosis
Artificial intelligence marketing		400	3.96	0.381	-0.327	0.332
	Accuracy Experience	400	3.98	0.605	-0.222	-0.275
	Insight Experience	400	3.97	0.738	-0.540	0.109
	Interactive Experience	400	3.95	0.550	-0.290	-0.170
Brand Equity	Brand Equity		3.87	0.541	0157	-0.192
	Brand Awareness	400	3.83	0.728	-0.220	-0.175
	Perceived Quality	400	3.93	0.761	-0.343	-0.165
	Brand Loyalty	400	3.91	0.750	-0.294	-0.361
	Brand Association	400	3.82	0.710	-0.077	-0.364
Brand Trust	Brand Trust		3.98	0.638	-0.355	0.421
	BT 1	400	4.04	0.852	-0.483	-0.334
	BT 2	400	3.86	0.978	-0.675	0.195
	BT 3	400	4.04	0.850	-0.475	-0.257
	BT 4	400	3.97	0.854	-0.458	-0.256
Purchase Inte	Purchase Intention		3.98	0.810	-0.472	-0.175
	PI1	400	3.98	0.867	-0.388	-0.512
	PI2	400	4.00	0.867	-0.417	-0.484
	PI3	400	3.94	0.960	-0.773	0.535
	PI4	400	3.98	0.861	-0.402	-0.315

Bartlett's test of sphericity yielded a statistically significant result ( $\chi^2 = 3436$ , df = 120, p < 0.001), indicating that the correlation matrix was not an identity matrix, with significance at the p < 0.01 level. This suggests that the variables were sufficiently intercorrelated to proceed with factor analysis. This finding is supported by the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which was 0.822, approximating 1 and demonstrating that the observed variables were adequately related. Given that the KMO index exceeded the threshold of 0.80, the data was deemed highly suitable for factor analysis [18].

#### 4.3. Confirm Factor Analysis

The fit of the measurement model to the theoretical model was assessed by comparing the statistical indices with the following criteria: the chi-square ratio ( $\chi^2$ /df) should be less than 2, the p-value should be non-significant, the CFI and TLI should be greater than 0.94, and the RMSEA should be less than 0.07. Based on these criteria, the measurement model demonstrated a good fit [19] as shown in Table 3.

**Table 3**. Confirm Factor Analysis (CFA).

Commin Factor Analysis (CFA).					
Factor	$X^2$	P-value	CFI	TLI	RMSEA
Artificial intelligence marketing	4.020	0.260	1.000	1.000	0.000
Brand Equity	5.920	0.073	0.990	1.000	0.000
Trust	2.910	0.234	0.998	0.963	0.034
Purchase Intention	5.363	0.536	0.985	0.956	0.067

In Table 3, The fit of the measurement model to the theoretical model was assessed by comparing the statistical indices with the following criteria: the chi-square ratio ( $\chi^2$ /df) should be less than 2, the p-value should be non-significant, the CFI and TLI should be greater than 0.94, and the RMSEA should be less than 0.07. Consequently, the measurement model

demonstrated adequate fit [19]. These fit indices indicate that the model aligns with the empirical data, supporting its suitability for Structural Equation Modeling (SEM) analysis, as shown in Table 4.

**Table 4**. Fit indices of the structural equation model.

Item	$X^2$	P-value	CFI	TLI	RMSEA
Structural Equation Modeling (SEM)	53.1	0.934	1.000	1.008	0.035

Table 4 illustrates that the Structural Equation Model (SEM) demonstrated acceptable fit based on the following criteria: the chi-square ratio ( $\chi^2$ /df) should be less than 2, the p-value should be non-significant, the CFI and TLI should be greater than 0.94, and both the SRMR and RMSEA should be less than 0.08 [20]. These indices suggest that the measurement model adequately represents the theoretical model. Therefore, it can be concluded that the model exhibits satisfactory fit.

The hypothesis testing revealed that the AI utilized by e-commerce platforms for product presentation serves primarily as a convenience tool and does not significantly drive purchase intention. Rather, consumer confidence in the product is a prerequisite for influencing purchase intention. Furthermore, brand value exerts both direct and indirect effects on purchase intention, with consumer confidence mediating this relationship significantly within the e-commerce context, as detailed in Table 5.

**Table 5**. The hypothesis testing.

	Hypothesis	p-value	Translate
H1	AIM > TRU > PUR	< 0.001	Supported
H2	EQ > TRU > PUR	0.855	Not Supported
Н3	TRU > PUR	< 0.001	Supported
H4	AIM > PUR	0.266	Not Supported
H5	BQ > PUR	0.024	Supported

**Note:** Significance level: p < 0.05.

#### 5. Discussion

## 5.1. Theoretical Implications

Regarding artificial intelligence marketing, analysis of the study results revealed that, consistent with Hypothesis 1, artificial intelligence marketing has an indirect effect on purchase intention, mediated by trust. This aligns with the findings of Yin and Qiu [14] who asserted that artificial intelligence technology in online sales channels positively influences consumer experience concerning brand value perception, thereby increasing consumer purchase intention in these channels. This is further supported by Liu-Thompkins, et al. [12] who emphasized trust as a crucial element in customer-organization relationships, particularly in AI-enabled interactions. Specifically, when customers perceive that the AI system effectively meets their needs, it fosters increased customer trust. Conversely, inconsistent with Hypothesis 3, artificial intelligence marketing does not directly affect purchase intention. Concerning brand equity, analysis of the study results for Hypothesis 2 indicated that brand value does not exert an indirect effect on purchase intention, mediated by trust. This contradicts the findings of Lusianti, et al. [10] who posited that consumer perception of brand value enhances brand trust and cultivates a positive relationship between customers and the brand. However, consistent with Hypothesis 5, brand value significantly influences purchase intention. This corroborates the findings of Louvet [8] who argued that brands capable of delivering value to customers strengthen their brand's distinctiveness and differentiation from competitors. Furthermore, Kurt and Kara [9] demonstrated that increasing brand value positively impacts customer behavior, enhancing brand liking and interest, purchase willingness, and customer loyalty driven by trust and perceived high quality.

Regarding brand trust, analysis of the study results related to Hypothesis 3 showed that trust directly affects purchase intention. This is supported by the research of Andharini and Satiti [15] highlighting the significant influence of celebrities followed by customers on their purchase intentions. Specifically, positive mentions of products or services by celebrities on the Shopee application increase consumer desire for those offerings. This aligns with Qotrunnada and Aprilianty [13] who, in their study on the influence of customer trust on marketing email acceptance and purchase intentions for online paid short courses, concluded that trust significantly affects purchase decisions.

#### 5.2. Practical Implications

The findings from this study provide several practical implications for e-commerce platform operators, brand managers, and marketers. First, the significant indirect effect of artificial intelligence marketing on purchase intention through trust suggests that e-commerce businesses should focus on developing AI systems that not only offer accurate recommendations but also actively build consumer trust. Platform developers should emphasize transparency in how AI systems process user data and generate recommendations, perhaps by explaining recommendation logic or allowing users to customize their recommendation parameters. Second, the direct effect of brand equity on purchase intention underscores the continued importance of traditional branding strategies even in AI-enhanced digital environments. Brands operating in e-commerce marketplaces should maintain consistent brand messaging, quality assurance, and distinctive brand assets to strengthen consumer perception of brand value.

Additionally, the significant relationship between brand trust and purchase intention highlights the critical role of trust-building mechanisms in e-commerce. Marketplace operators should implement robust security measures, transparent policies, reliable customer service, and satisfaction guarantees to foster trust among consumers. The study's demographic findings, revealing that younger consumers (21-30 years) constitute the majority of e-commerce users, suggest that platforms should design AI features and brand communication strategies that resonate with this tech-savvy demographic while also addressing their potential trust concerns.

For marketers, these results indicate that AI-powered recommendation systems should be positioned not merely as convenience tools but as trust-enhancing mechanisms that genuinely understand and anticipate consumer needs. The integration of AI capabilities with strong brand messaging could create synergistic effects that maximize purchase intention. Finally, considering that trust mediates the relationship between AI marketing and purchase intention, businesses should prioritize ethical AI practices that protect consumer privacy and demonstrate genuine value, rather than focusing solely on algorithmic sophistication or recommendation accuracy.

## 5.3. Limitations

This study has several limitations that should be acknowledged. First, the research was conducted in Thailand, with a sample predominantly consisting of young adults (68% aged 21-30) with bachelor's degrees (82.75%), which may limit the generalizability of findings to other demographic groups or cultural contexts. The specific characteristics of Thai e-commerce platforms and consumer behavior patterns may differ from those in other markets, particularly Western or more developed e-commerce ecosystems.

Second, the cross-sectional nature of the data collection prevents the establishment of causal relationships between variables and does not account for how consumer perceptions of AI, brand equity, and trust might evolve over time as technology advances and familiarity increases. Longitudinal research would provide more robust insights into these dynamic relationships. Third, the study relied exclusively on self-reported measures, which may be subject to social desirability bias, especially regarding trust and purchase intentions.

Fourth, while the study examined artificial intelligence marketing broadly, it did not differentiate between various AI technologies or implementation approaches that may have differential effects on consumer trust and purchase intention. Future research could explore specific AI features (e.g., chatbots, visual search, personalized emails) to provide more granular insights. Fifth, the research did not control for potential moderating variables such as prior experience with ecommerce platforms, technological literacy, or privacy concerns, which might influence the relationships among the constructs. Finally, the measurement of brand equity was generalized rather than brand-specific, which may have obscured important variations in how consumers perceive and respond to different brands' AI-enabled recommendation systems within e-commerce platforms.

# 5.4. Conclusion

This research enhances our understanding of how artificial intelligence marketing and brand equity influence consumer purchase intentions in the e-commerce marketplace environment, with brand trust playing a crucial mediating role. The findings reveal that AI-powered recommendation systems primarily serve as convenience tools that build trust rather than directly driving purchase decisions, while brand equity maintains a direct influence on purchase intention. These results highlight the complex interplay between technological innovations and traditional branding principles in the digital marketplace context. For e-commerce stakeholders, the key takeaway is that while AI capabilities offer significant potential for enhancing the consumer experience, they must be implemented within a framework that prioritizes trust-building and complements brand value propositions. Future research should expand on these findings by exploring different types of AI implementations across diverse cultural contexts and investigating how these relationships evolve as AI technology and consumer familiarity with it continue to advance.

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