Brand Reputation in the Age of AI: Impact of AI-Driven Customer Interaction, Social Media Engagement, and Sustainability Messaging on Consumer Trust and Purchase Intention

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ABSTRACT

The rapid advancement of artificial intelligence (AI) has significantly transformed digital branding, necessitating a deeper investigation into how AI-driven strategies influence consumer behavior in emerging markets. This study examined the impact of AI-driven customer interaction, social media engagement, and sustainability messaging on brand trust and purchase intention, with brand trust hypothesized as a mediating variable. A descriptive-correlational design was employed, using structured questionnaires distributed to 600 digitally active consumers in Metro Cebu. Data analysis included Pearson correlation, multiple regression, and mediation analysis via bootstrapping to test the proposed relationships. Results revealed that all three digital branding strategies significantly predicted brand trust, which in turn was the strongest predictor of purchase intention; mediation analysis confirmed the critical role of trust in translating digital interactions into consumer decisions. These findings offer practical implications for marketers aiming to build sustainable brand reputations in AI-intensive environments, emphasizing the integration of personalization, ethical messaging, and trust-building as key components of future-ready digital branding models.

Keywords: Artificial Intelligence, Brand Trust, Purchase Intention, Digital Branding Strategies, Consumer Engagement
JEL Classifications: M31, M37, O33

1. INTRODUCTION

In the evolving digital economy, brand reputation has emerged as a vital intangible asset that shapes consumer perceptions, influences market positioning, and drives business sustainability. With the proliferation of artificial intelligence (AI), organizations are increasingly relying on AI-powered customer engagement tools, dynamic social media platforms, and sustainability messaging to manage and enhance brand reputation in real time. These technologies are redefining how brands communicate, build relationships, and foster trust, especially in hyperconnected consumer markets. AI systems now personalize customer interactions, streamline brand-consumer touchpoints, and automate responses, creating a seamless digital experience that contributes to consumer satisfaction and perceived reliability (Sipos, 2025). This digital transformation necessitates a deeper examination of how AI-enabled branding strategies influence consumer trust and decision-making across emerging market contexts.

Social media engagement plays an equally critical role in shaping brand reputation, serving as a conduit for consumer interaction, storytelling, and community-building. Interactive campaigns, influencer partnerships, and user-generated content have significantly enhanced brand visibility and consumer loyalty in various industries (Bakri, 2023). However, engagement is no longer limited to visibility—it now functions as a trust-building mechanism that reflects authenticity, consistency, and emotional connection. In highly digitized environments, where consumers are inundated with content, meaningful engagement differentiates reputable brands from transactional entities (Gani et al., 2023). Thus, brands must be evaluated not only by their technological capabilities but by their ability to cultivate trust through personalized and socially resonant communication.

The inclusion of sustainability messaging adds a new dimension to brand reputation, especially as consumers become more conscious of ethical and environmental practices. Brands that communicate their sustainability commitments transparently often gain trust and loyalty from ethically driven consumers (Lee et al., 2025). AI enables brands to scale these messages efficiently while customizing them based on audience preferences, thereby enhancing both reach and relevance. Despite these benefits, the impact of sustainability messaging, especially when AI-generated, on consumer trust and purchase behavior remains underexplored in emerging economies. The ethical and strategic implications of such messaging demand empirical inquiry to ensure credibility and long-term brand value.

While prior studies have extensively analyzed digital marketing tactics, influencer engagement, and AI personalization (Ramachandran et al., 2024; Singh et al., 2024), there is a clear gap in the literature regarding the integrated influence of AI-driven customer interaction, social media engagement, and sustainability messaging on brand trust and purchase intention. Most existing models isolate these constructs, overlooking how they function collectively to build reputation and influence consumer behavior in AI-mediated brand ecosystems. Additionally, research focused on mature Western markets often fails to capture the sociocultural and technological nuances of consumers in rapidly developing regions such as Metro Cebu. This gap limits both theoretical understanding and practical application in localized brand strategy development. The present study seeks to address this by offering an empirically grounded model within the Southeast Asian context.

This study adopts a unified approach to examine how three distinct yet interconnected digital branding strategies—AI-driven customer interaction, social media engagement, and sustainability messaging—influence consumer trust and purchase intention in an AI-driven economy. Unlike prior research that often conceptualizes brand trust as a static outcome, this study positions it as a mediating construct that dynamically links digital strategies to consumer behavior. In doing so, the research advances the discourse on AI-enhanced branding by capturing the multidimensional and interdependent nature of brand-consumer relationships in the digital age. By contextualizing the model in Metro Cebu, the study offers region-specific insights that remain underrepresented in existing literature, particularly within Southeast Asian markets. These findings are expected to inform both global branding

frameworks and locally adaptive marketing strategies within increasingly AI-intensive commercial environments.

This study has practical value for brand strategists, digital marketers, and customer experience designers who are navigating the complexities of consumer trust in technologically saturated markets. By identifying which digital strategies most effectively enhance trust and drive purchase intention, the findings can guide organizations in prioritizing investments and refining AI integration. Furthermore, the study informs sustainability communication practices by validating their reputational impact when mediated by trust. For emerging economies like the Philippines, where digital adoption is rising but ethical branding remains inconsistent, the study offers evidence-based guidance for building long-term consumer relationships. Ultimately, this research supports the development of intelligent, ethical, and consumer-centric branding strategies aligned with the expectations of the AI age.

1.1. Research Objectives

This study examined how AI-driven customer interaction, social media engagement, and sustainability messaging influence brand reputation, consumer trust, and purchase intention in Metro Cebu. Specifically, it aimed to:

1. Determine the level of brand reputation based on these digital branding strategies;
2. Assess their influence on consumer trust;
3. Evaluate the effect of consumer trust on purchase intention; and
4. Examine the mediating role of trust between digital branding strategies and purchase intention.

2. LITERATURE REVIEW

2.1. AI-Driven Customer Interaction

AI-driven customer interaction has become a pivotal element in enhancing responsiveness, personalization, and overall customer satisfaction across various digital platforms. Recent studies have emphasized how AI architectures, such as chatbots and recommendation engines, streamline service delivery and foster continuous engagement, particularly in fast-paced retail and service sectors (Inavolu, 2024). Despite these advancements, challenges remain in contextual sensitivity and emotional responsiveness, especially in non-Western consumer settings, where cultural nuances influence trust and digital behavior (Venkateswaran, 2023). While prior research has examined AI's role in CRM for SMEs, most studies lack empirical validation of AI interaction's influence on brand trust and purchase intention within Southeast Asian urban markets like Metro Cebu (Iyelolu et al., 2024). This study addresses that gap by empirically investigating how AI-driven customer interaction shapes brand reputation and behavioral outcomes, offering region-specific insights that enhance both theoretical development and practical applications for emerging economies.

2.2. Social Media Engagement

Social media engagement serves as a critical channel through which brands cultivate relationships, amplify visibility, and drive consumer behavior in digital ecosystems. Meta-analytic evidence has shown that brand-owned social media efforts significantly impact engagement metrics and sales performance, particularly

when content is interactive, timely, and aligned with brand values (Liadeli et al., 2023). While strategies like influencer marketing and sponsored content enhance visibility, their effectiveness depends on perceived authenticity and emotional resonance with target audiences (Gross and Von Wangenheim, 2022). However, existing literature is predominantly centered on Western markets and high-engagement sectors, overlooking how localized consumer behavior, cultural expectations, and digital literacy influence engagement outcomes in emerging economies (Ponce et al., 2022). This study addresses this gap by exploring how social media engagement strategies affect brand trust and purchase intention among digitally active consumers in Metro Cebu, offering context-specific insights that support scalable, culturally adaptive digital branding.

2.3. Sustainability Messaging

Sustainability messaging has emerged as a powerful branding strategy that not only communicates corporate responsibility but also fosters deeper consumer trust and loyalty. Research has shown that the configuration of sustainability messages on social media, including clarity, credibility, and emotional appeal, significantly influences message sharing and consumer engagement (Knight et al., 2022). Greenfluencers and ethically framed sponsored content further enhance sustainable consumption by positioning brands as socially responsible agents of change (Kapoor et al., 2023). However, most existing studies focus on message effectiveness in mature markets, with limited insight into how sustainability messaging shapes trust and purchase behavior in digital-first, developing contexts (Florence et al., 2022). To address this gap, the present study investigates the role of sustainability messaging in influencing brand trust and purchase intention among Filipino consumers in Metro Cebu, contributing region-specific evidence to the evolving discourse on ethical branding in the age of AI.

2.4. Brand Trust

Brand trust plays a foundational role in shaping consumer perceptions, fostering loyalty, and mediating the effectiveness of marketing strategies in digital environments. Empirical studies have shown that social media marketing significantly enhances brand trust, which in turn influences brand equity and long-term consumer commitment (Haudi et al., 2022). Furthermore, brand trust has been identified as a critical moderator and mediator in the relationship between brand experience and brand loyalty, serving as a psychological bridge to emotional attachment or brand love (Bae and Kim, 2023). While existing frameworks emphasize the transition from trust to affective outcomes like loyalty and love, few studies have quantitatively examined how trust is initially constructed through AI-driven interaction and ethical branding in emerging digital economies (Marmat, 2023). This study addresses that gap by analyzing the trust-building capacity of AI-enabled strategies—specifically customer interaction, social media engagement, and sustainability messaging—in the context of Metro Cebu, thus offering fresh insights into digital trust formation in non-Western markets.

2.5. Purchase Intention

Purchase intention remains a central construct in consumer behavior research, particularly in digital environments where social media and AI-driven strategies significantly influence decision-making processes. Recent studies have demonstrated that platforms like TikTok, through electronic word-of-mouth (eWOM) and influencer content, have a measurable impact on consumers' intent to buy, especially among younger demographics (Yones and Muthaiyah, 2023). Digital marketing strategies, when supported by strong brand equity, further enhance this intent by creating credibility and perceived value around the brand (Alwan and Alshurideh, 2022). However, the existing literature often isolates social media or product quality as singular predictors, lacking integrated models that consider trust as a mediating mechanism in AI-enhanced branding strategies (Meliawati et al., 2023). This study addresses this gap by examining how AI-driven customer interaction, social media engagement, and sustainability messaging collectively influence purchase intention through the mediating role of brand trust in the Metro Cebu context.

2.6. Hypotheses

H_1: AI-driven customer interaction positively influences brand trust

H_2: Social media engagement significantly affects brand trust

H_3: Sustainability messaging has a direct positive effect on brand trust

H_4: Brand trust significantly predicts consumer purchase intention

H_5: Brand trust mediates the relationship between digital branding strategies and purchase intention.

3. METHODOLOGY

3.1. Design

This study employed a quantitative, descriptive-correlational design to investigate the relationships among AI-driven customer interaction, social media engagement, sustainability messaging, brand trust, and purchase intention. The correlational approach was appropriate for examining predictive relationships without variable manipulation and for identifying mediation effects within natural consumer behavior. The quantitative framework allowed the use of structured instruments and standardized scales to measure behavioral constructs relevant to AI-enhanced branding. Hypotheses were tested through regression and mediation analyses, ensuring empirical rigor consistent with prior research on AI-driven consumer trust and digital marketing dynamics.

3.2. Environment

This study was conducted in Metro Cebu, Philippines—an urban hub characterized by high digital literacy, rapid e-commerce expansion, and growing integration of AI in business practices. The location provided a suitable setting for exploring how AI-driven interaction, social media engagement, and sustainability messaging influence consumer trust and purchasing behavior. Data were collected through online surveys disseminated via social media and institutional networks, enabling efficient access to digitally active consumers directly exposed to AI-mediated brand experiences.

3.3. Respondents

This study selected 600 respondents aged 18-35 residing in Metro Cebu using a purposive sampling technique. Participants qualified if they had (1) interacted with AI tools such as chatbots

or recommendation systems, (2) made online purchases or brand-related engagements within the previous 3 months, and (3) demonstrated familiarity with social media and e-commerce platforms. These criteria ensured that respondents possessed relevant exposure to AI-driven branding environments. Recruitment was conducted through targeted online advertisements and academic network referrals to reach digitally active consumers. The sample size met the statistical requirements for multiple regression and mediation analyses, providing sufficient power, precision, and representativeness to achieve the study's analytical objectives.

3.4. Data Analysis

This study employed descriptive and inferential statistical techniques using IBM SPSS Statistics 29 and the PROCESS Macro v4.0. Descriptive statistics summarized the demographic characteristics of respondents and the central tendencies of each construct. Inferential analyses, including Pearson correlation, multiple regression, and mediation testing, were utilized to examine the relationships among AI-driven customer interaction, social media engagement, sustainability messaging, brand trust, and purchase intention. Bootstrapping with 5,000 resamples was applied to test the indirect effects of the three digital strategies on purchase intention through brand trust. These analytical procedures ensured the accuracy, reliability, and robustness of results, providing empirical support for the hypothesized model and aligning with methodological standards in contemporary quantitative marketing research.

3.5. Ethical Consideration

Ethical standards were upheld throughout the research process to ensure the protection and confidentiality of all participants. Respondents were provided with a digital informed consent form outlining the study's purpose, voluntary participation, right to withdraw, and assurance of anonymity. No personally identifiable data was collected, and all responses were securely stored using encrypted digital platforms. The study was approved by the Research Ethics Committee of the researcher's academic institution, ensuring compliance with institutional and international ethical research standards. The analysis and reporting of data were conducted with transparency and academic integrity.

4. RESULTS AND DISCUSSION

Table 1 presents the demographic profile of 600 respondents from Metro Cebu, showcasing a predominantly young, educated, and digitally active consumer base. Most participants fall within the 25-30 age bracket (42%), are female (52.5%), and are college graduates (67%), indicating a high level of digital literacy and professional engagement. The majority are employed full-time (57%), with a substantial portion engaging in online shopping 2-3 times monthly (38.5%) or weekly (31%), highlighting their relevance for evaluating AI-driven branding strategies. These characteristics align with contemporary findings that younger, urban populations are more responsive to digital innovations and sustainability messaging in commercial interactions (Almaden et al., 2022; Lagbas, 2022). The demographic data thus validates the study's target population as strategically positioned to assess brand reputation in the age of AI.

Table 1: Demographic profile of respondents in metro Cebu (n=600)

Demographic variable	Category	Frequency (f)	Percentage
Age	18-24 years	198	33.00
	25-30 years	252	42.00
	31-35 years	150	25.00
Gender	Male	285	47.50
	Female	315	52.50
Educational attainment	High school graduate	54	9.00
	College graduate	402	67.00
	Postgraduate degree holder	144	24.00
Employment status	Student	108	18.00
	Employed (full-time)	342	57.00
	Employed (part-time/ freelance)	96	16.00
	Unemployed	54	9.00
Online shopping frequency	Once a month	93	15.50
	2-3 times per month	231	38.50
	Weekly	186	31.00
	More than once a week	90	15.00

This table offers practical value by enabling marketers and brand strategists to tailor AI and digital engagement tools to Metro Cebu consumers' distinct socio-economic and behavioral traits. For instance, sustainability messaging and AI-enhanced personalization may resonate more strongly with this digitally savvy and environmentally conscious demographic (Anburuvel et al., 2022). This regional specificity of the sample addresses a gap in the literature that often overlooks secondary urban centers like Metro Cebu in favor of national-level datasets. By contextualizing consumer behavior within a localized digital economy, this research enhances the precision of branding models applicable to developing Southeast Asian markets. Moreover, the table establishes the demographic baseline necessary for examining the mediating role of brand trust in AI-influenced consumer decision-making, contributing new insights to evolving models of digital-era brand equity (Liza and Moscosa, 2023).

Table 2 presents the descriptive statistics of key variables, revealing consistently high mean values across all constructs, suggesting a generally positive perception among Metro Cebu consumers toward AI-mediated branding. Sustainability messaging attained the highest mean (M = 4.41), indicating strong consumer receptiveness to environmentally responsible brand communication. AI-driven customer interaction (M = 4.32) and brand trust (M = 4.29) also scored highly, reinforcing the growing acceptance of algorithmic personalization and ethical branding in shaping positive brand evaluations (Bashynska, 2023). The relatively low standard deviations (ranging from 0.47 to 0.56) demonstrate minimal dispersion, suggesting consistent consumer attitudes within the sample. Notably, the high mean for purchase intention (M = 4.37) reflects consumers' readiness to engage in transactions with brands perceived as trustworthy and digitally adaptive.

The findings demonstrate practical value by confirming that consumers respond favorably to the integrated use of AI, social

Table 2: Descriptive statistics of key variables

Variable	Number of items	Mean	Standard deviation	Minimum	Maximum
AI-driven customer interaction	5	4.32	0.51	2.60	5.00
Social media engagement	5	4.18	0.56	2.40	5.00
Sustainability messaging	5	4.41	0.49	2.80	5.00
Brand trust	4	4.29	0.53	2.50	5.00
Purchase intention	4	4.37	0.47	2.90	5.00

AI: Artificial intelligence

Table 3: Reliability and validity of constructs

Construct	No. of items	Cronbach's alpha (α)	Composite reliability	Average variance extracted
AI-driven customer interaction	5	0.882	0.902	0.650
Social media engagement	5	0.869	0.888	0.628
Sustainability messaging	5	0.894	0.912	0.685
Brand trust	4	0.873	0.890	0.670
Purchase intention	4	0.886	0.904	0.692

AI: Artificial intelligence

media, and sustainability in branding, validating these as high-return strategic investments. The novelty of this table lies in its empirical validation of AI-driven reputation-building mechanisms within a localized Southeast Asian market, which remains underrepresented in global literature (Aljarah et al., 2025; Ding et al., 2025). This statistical snapshot also fills a methodological gap by quantifying the simultaneous impact of digital interaction, engagement, and ethics—areas often examined in isolation. These results imply that a successful brand strategy must combine technological personalization with social consciousness to foster trust and influence consumer behavior (Chowdhury et al., 2024). Moreover, the convergence of high scores across all variables reinforces the proposed mediating role of brand trust, thus offering theoretical clarity for further path analysis.

Table 3 presents the reliability and validity results of all constructs used in the study, confirming the measurement model's statistical soundness and internal consistency. All five constructs—AI-driven customer interaction, social media engagement, sustainability messaging, brand trust, and purchase intention—exceeded the acceptable thresholds for reliability, with Cronbach's alpha values ranging from 0.869 to 0.894 and composite reliability (CR) values above 0.88, indicating excellent internal consistency. The average variance extracted (AVE) for each construct also surpassed the minimum threshold of 0.50, confirming strong convergent validity and that the items accurately represent their underlying constructs. These metrics support the robustness of the survey instrument and ensure that the theoretical relationships among variables are measured with minimal error and high precision. The consistent reliability across constructs adds credibility to the subsequent regression and mediation analyses.

This table provides practical value by validating the tool's appropriateness for assessing digital branding in emerging economies, where AI-driven strategies are accelerating yet remain under-evaluated. Its novelty lies in the simultaneous validation of constructs that integrate algorithmic interaction, consumer trust, and sustainability messaging, areas rarely combined in regional empirical marketing studies. By establishing strong psychometric properties, this table addresses a methodological gap in AI branding literature, which often lacks rigor in construct

Table 4: Pearson correlation matrix among variables

Variables	1	2	3	4	5
1. AI-driven customer interaction	1				
2. Social media engagement	0.614**	1			
3. Sustainability messaging	0.582**	0.601**	1		
4. Brand trust	0.677**	0.653**	0.712**	1	
5. Purchase intention	0.638**	0.626**	0.681**	0.774**	1

AI: Artificial intelligence

validation when applied to non-Western contexts. It also lays a reliable foundation for marketers and researchers to adopt similar instruments in Southeast Asian markets. The strong reliability indicators ensure that any observed effects in the study are due to true construct relationships, not measurement bias. Thus, the results lend both methodological credibility and theoretical depth to the study's exploration of AI-enhanced brand reputation.

Table 4 reveals strong and statistically significant correlations among all variables, with brand trust exhibiting the highest correlation with purchase intention ($r = 0.774$, $P < 0.01$). AI-driven customer interaction, social media engagement, and sustainability messaging are all positively associated with both brand trust and purchase intention, indicating interconnected pathways in consumer decision-making. These results affirm that personalized and ethical digital strategies contribute meaningfully to shaping consumer trust and loyalty (Ahmed et al., 2025). The table adds practical value by empirically supporting a trust-centered branding model where AI and social messaging reinforce consumer engagement (Sipos, 2025). It addresses the gap in integrated correlation analysis within AI branding literature, especially in emerging digital economies like Metro Cebu.

Table 5 demonstrates that all three predictors—AI-driven customer interaction ($\beta = 0.324$), social media engagement ($\beta = 0.261$), and sustainability messaging ($\beta = 0.408$)—significantly influence brand trust ($P < 0.001$). The model explains 66% of the variance in brand trust, indicating strong predictive validity and confirming that digital brand strategies are central to trust-building. Among the predictors, sustainability messaging is the most influential, emphasizing

consumers' growing preference for ethical transparency over mere functionality (Alkaied et al., 2024). These findings offer practical value by guiding marketers to prioritize sustainability as a trust accelerator when deploying AI and digital campaigns (Ali et al., 2025). This table addresses a theoretical gap by empirically validating the distinct yet complementary roles of AI, social media, and ethics in shaping trust within an emerging market context.

Table 6 reveals that all four predictors—AI-driven customer interaction, social media engagement, sustainability messaging, and brand trust—significantly influence purchase intention, with brand trust emerging as the strongest predictor ($\beta = 0.460$, $P < 0.001$). The model explains 72.4% of the variance in purchase intention, indicating a robust explanatory framework for consumer behavior in the AI-enhanced branding environment. The results emphasize that while digital strategies play a foundational role, it is consumer trust that ultimately drives conversion from awareness to intention (Bag et al., 2022; Cheng & Jiang, 2022). Practically, this highlights the importance of trust-centric brand design in digital ecosystems where AI and social engagement must align with consumer expectations and ethical standards (Ding et al., 2025; Esperanza et al., 2025). The table addresses a critical gap in the literature by integrating brand trust as a mediating construct

in AI-driven consumer pathways, offering empirical clarity to previously fragmented models of digital consumer engagement.

Table 7 confirms that brand trust significantly mediates the relationship between AI-driven customer interaction, social media engagement, and sustainability messaging with purchase intention, with all indirect effects statistically significant ($P < 0.001$). The strongest indirect pathway is observed between sustainability messaging and purchase intention through brand trust ($B = 0.137$), emphasizing the ethical dimension of branding in AI-enhanced consumer behavior. These findings suggest that while digital strategies directly influence consumer decisions, their impact is amplified when trust is established as an intermediary mechanism (Bano et al., 2025; Haris, 2025). Practically, this reinforces the importance of integrating transparent and responsible AI tools to foster brand-consumer relationships built on trust, especially in hyper-personalized digital markets (Alzoubi et al., 2025). This table provides a bootstrapped mediation to quantify trust as a psychological bridge between digital interaction and behavioral intention—a gap often overlooked in linear AI-branding studies.

Table 8 provides a comprehensive summary of hypothesis testing and confirms that all proposed relationships in the

Table 5: Multiple regression results predicting brand trust

Predictor variable	Unstandardized coefficient (B)	Standard error	Standardized beta (β)	t-value	P-value
(Constant)	1.142	0.188	—	6.074	<0.001
AI-driven customer interaction	0.298	0.043	0.324	6.93	<0.001
Social media engagement	0.244	0.049	0.261	4.98	<0.001
Sustainability messaging	0.365	0.046	0.408	7.935	<0.001
Model summary					
R=0.812	R²=0.660	Adjusted R²=0.658	F (3, 596)=385.17	P<0.001	

Table 6: Multiple regression results predicting purchase intention

Predictor variable	Unstandardized coefficient (B)	Standard error	Standardized beta (β)	t-value	P-value
(Constant)	0.987	0.176	—	5.609	<0.001
AI-driven customer interaction	0.181	0.041	0.209	4.415	<0.001
Social media engagement	0.168	0.046	0.185	3.652	<0.001
Sustainability messaging	0.204	0.045	0.232	4.533	<0.001
Brand trust	0.376	0.039	0.46	9.641	<0.001
Model summary					
R=0.851	R²=0.724	Adjusted R²=0.721	F (4, 595)=389.11	P<0.001	

AI: Artificial intelligence

Table 7: Mediation analysis results: The mediating role of brand trust

Bootstrapping method with 5,000 resamples|confidence interval (CI) at 95%						
Path	Effect (B)	SE	LLCI	ULCI	P-value	Significance
AI-driven interaction→Brand Trust (a₁)	0.298	0.04	0.21	0.37	<0.001	Significant
Social media engagement→Brand Trust (a₂)	0.244	0.05	0.15	0.34	<0.001	Significant
Sustainability messaging→Brand Trust (a₃)	0.365	0.05	0.28	0.45	<0.001	Significant
Brand trust→Purchase Intention (b)	0.376	0.04	0.3	0.45	<0.001	Significant
Direct effect: AI Interaction→Purchase Int.	0.181	0.04	0.1	0.26	<0.001	Significant
Direct effect: Social Media→Purchase Int.	0.168	0.05	0.08	0.25	<0.001	Significant
Direct effect: Sustainability→Purchase Int.	0.204	0.05	0.12	0.29	<0.001	Significant
Indirect effect (mediation)						
AI interaction→Brand Trust→Purchase Int.	0.112	0.03	0.07	0.16	<0.001	Significant
Social media→Brand Trust→Purchase Int.	0.092	0.02	0.05	0.14	<0.001	Significant
Sustainability→Brand Trust→Purchase Int.	0.137	0.03	0.08	0.2	<0.001	Significant

AI: Artificial intelligence, SE: Standard errors

Table 8: Summary of hypotheses testing and model fit

Hypothesis	Path tested	β/indirect effect	P-value	Result
H₁: AI-driven customer interaction significantly predicts brand trust	AI Interaction→Brand Trust	$\beta=0.324$	<0.001	Supported
H₂: Social media engagement significantly predicts brand trust	Social Media→Brand Trust	$\beta=0.261$	<0.001	Supported
H₃: Sustainability messaging significantly predicts brand trust	Sustainability→Brand Trust	$\beta=0.408$	<0.001	Supported
H₄: Brand trust significantly predicts purchase intention	Brand Trust→Purchase Intention	$\beta=0.460$	<0.001	Supported
H₅: Brand trust mediates the relationship between digital strategies and purchase intention	AI→Trust→Purchase	0.112	<0.001	Fully
	Social→Trust→Purchase	0.092		Supported
	Sustainability→Trust→Purchase	0.137		

Table 9: Model fit summary (from regression models)

Fit index	Value	Interpretation
R^2 (brand trust model)	0.66	Strong fit
R^2 (purchase intention model)	0.724	Very strong fit
F-value (overall model)	389.11	Highly significant (P<0.001)
Significance level	P<0.001	All paths statistically valid

model are statistically supported, with brand trust serving as a critical mediator. The strongest direct predictor of brand trust is sustainability messaging ($\beta = 0.408$), followed by AI-driven interaction and social media engagement, validating the relevance of ethical transparency and personalization in the branding landscape (Pittman et al., 2022). The mediating role of brand trust is particularly noteworthy, as it translates digital engagement strategies into actionable purchase intention, a dynamic reinforced by commitment-trust theory in consumer psychology (Rashidi-Sabet and Bolton, 2024). Practically, this highlights the strategic necessity for businesses to design AI and content platforms that build relational trust before expecting behavioral conversion (Agbo-Adediran et al., 2025; Jesus et al., 2025). This table addresses a crucial literature gap by empirically integrating AI, ethics, and trust into a cohesive model of consumer behavior, using robust hypothesis testing to clarify their interdependent roles.

Table 9 presents the model fit summary, indicating that the regression models for brand trust ($R^2 = 0.66$) and purchase intention ($R^2 = 0.724$) demonstrate strong and very strong explanatory power, respectively. The high F-value (389.11) and significance level (P < 0.001) confirm that all paths in the model are statistically valid and meaningful, reinforcing the reliability of the hypothesized relationships. These values substantiate that AI-driven branding variables, when integrated with trust as a mediator, offer a coherent and predictive framework for consumer behavior in the digital era (Irawan et al., 2024). Practically, this strengthens the case for investing in AI-generated content that ensures brand identity consistency and trust cultivation across digital platforms (Komara and Juhana, 2025). This table offers rare empirical evidence of high model fit in a regional Southeast Asian context, filling a gap in AI-branding literature typically dominated by Western-centric datasets.

5. CONCLUSION AND RECOMMENDATIONS

The study conclusively established that brand reputation in the age of artificial intelligence was fundamentally shaped by the synergistic influence of AI-driven customer interaction, social media engagement, and sustainability messaging, with brand trust serving as the pivotal mediating construct. Empirical evidence confirmed that these digital branding strategies collectively enhanced consumer trust, which, in turn, emerged as the strongest determinant of purchase intention. Among the examined predictors, sustainability messaging demonstrated the greatest direct and indirect impact, underscoring the growing salience of ethical transparency and environmental consciousness in shaping consumer perceptions. The study's high model fit indices, internal consistency, and convergent validity substantiated the reliability of the proposed conceptual model.

Furthermore, the findings reinforced the theoretical proposition that trust-driven personalization and responsible digital communication were indispensable mechanisms for fostering durable consumer relationships in AI-mediated markets. The research contributed to the advancement of digital branding scholarship by contextualizing AI applications within an emerging Southeast Asian economy, thereby extending extant theories on technology-mediated trust beyond Western paradigms. This regional contextualization offered fresh empirical evidence supporting the central thesis that consumer trust, when cultivated through authentic engagement and sustainability-driven narratives, operated as a strategic bridge between technological innovation and behavioral intention. Ultimately, this study enriched both academic discourse and managerial practice by validating an integrated, trust-centered framework for understanding brand reputation in the AI economy.

Grounded on the empirical outcomes of this investigation, organizations were encouraged to embed ethical and transparent artificial intelligence systems across all customer touchpoints to strengthen brand trust and reputational equity. AI applications needed to extend beyond functional personalization to incorporate principles of fairness, data privacy, and algorithmic transparency, ensuring that digital engagement fostered not only convenience but also relational confidence. Firms operating in emerging digital markets, such as Metro Cebu, were advised to institutionalize sustainability messaging as a core strategic function of brand communication. This entailed crafting messages that were verifiable, traceable, and consistent across AI-generated and human-curated content, thereby aligning brand narratives with the ethical expectations of increasingly discerning consumers.

In addition, companies were urged to reinforce social media strategies that cultivate genuine, participatory interactions through AI-enabled tools, influencer partnerships, and community-based storytelling. Such approaches were found to enhance emotional

resonance and perceived authenticity—critical precursors to trust formation. Brand trust should likewise be recognized as a measurable strategic asset, systematically evaluated through digital analytics and consumer sentiment tracking to inform AI design, customer experience architecture, and strategic marketing decisions. To maximize relevance and inclusivity, AI branding frameworks should be localized to reflect cultural nuances, linguistic preferences, and contextual consumer behaviors prevalent in regional markets. Collectively, these recommendations provided a pragmatic roadmap for building resilient, trust-centric brand reputations that could sustain competitive advantage, ethical accountability, and consumer loyalty in an increasingly intelligent digital ecosystem.

REFERENCES

Agbo-Adediran, I., Adeusi, O.C., Bello, A.B., Afolabi, O.N. (2025), Analyzing the impact of AI adoption and ICT platforms in improving customer engagement of small and medium-sized enterprises (SMEs). Applied Sciences, Computing, and Energy, 2(2), 284-298.

Ahmed, S.M.M., Owais, M., Raza, M., Nadeem, Q., Ahmed, B. (2025), The impact of AI-driven personalization on consumer engagement and brand loyalty. Qlantic Journal of Social Sciences, 6(1), 311-323.

Ali, I., Saleem, M.U., Khan, A.A., Naz, A., Nawaz, M., Khan, H. (2025), An enhanced artificial intelligence generated virtual influencer framework: Examining the effects of emotional display on user engagement based on convolutional neural networks (CNNs). Annual Methodological Archive Research Review, 3(4), 184-209.

Aljarah, A., Ibrahim, B., Lopez, M. (2025), In AI, we do not trust! The nexus between awareness of falsity in AI-generated CSR ads and online brand engagement. Internet Research, 35(3), 1406-1426.

Alkaied, R.N., Khattab, S.A., Al Shaar, I.M., Zaid, M.K.A., Al-Bazaiah, S.A. (2024), The impact of artificial intelligence on re-purchase intentions: The mediation approach. Бизнес-информатика, 18(3), 87-107.

Almaden, A., Herbieto, J.R., Velasco, M.M. (2022), Contribution of professional teachers to the local economy of Cebu City, Philippines. JPAIR Multidisciplinary Research, 48(1), 127-149.

Alwan, M., Alshurideh, M.T. (2022), The effect of digital marketing on purchase intention: Moderating effect of brand equity. International Journal of Data and Network Science, 6(3), 837-848.

Alzoubi, H.M., Shameem, B., Mushtaq, S., Al Kurdi, B., Joghee, S., Hamadneh, S. (2025), Unveiling the role of artificial intelligence: Navigating personalized content marketing, customer engagement, and commitment with data transparency and security. International Review of Management and Marketing, 15(2), 343-355.

Anburuvel, A., Perera, W.U.L.D.P., Randeniya, R.D.S.S. (2022), A demand responsive public transport for a spatially scattered population in a developing country. Case Studies on Transport Policy, 10(1), 187-197.

Bae, B.R., Kim, S.E. (2023), Effect of brand experiences on brand loyalty mediated by brand love: The moderated mediation role of brand trust. Asia Pacific Journal of Marketing and Logistics, 35(10), 2412-2430.

Bag, S., Srivastava, G., Bashir, M.M.A., Kumari, S., Giannakis, M., Chowdhury, A.H. (2022), Journey of customers in this digital era: Understanding the role of artificial intelligence technologies in user engagement and conversion. Benchmarking: An International Journal, 29(7), 2074-2098.

Bakri, Z.F. (2023), Analyzing the influence of digital marketing strategies on business performance in the beauty industry: A comprehensive analysis of social media engagement and influencer collaborations. Journal on Economics, Management and Business Technology, 2(1), 37-48.

Bano, R., Azim, F., Mahmood, Z., Sanaullah, A., Ali, O. (2025), The role of artificial intelligence in personalized marketing: Enhancing customer experience, predictive targeting, and brand engagement. The Critical Review of Social Sciences Studies, 3(2), 50-65.

Bashynska, I. (2023), AI-driven personalization in advertising: Transforming consumer engagement through sustainability and circular economy. Scientific Journal of Bielsko-Biala School of Finance and Law, 27(4), 106-112.

Cheng, Y., Jiang, H. (2022), Customer-brand relationship in the era of artificial intelligence: Understanding the role of chatbot marketing efforts. Journal of Product and Brand Management, 31(2), 252-264.

Chowdhury, S., Basu, S., Ashoka, N., Singh, P.K. (2024), Influence of AI driven digital marketing on consumer purchase intention: An empirical study. Journal of Informatics Education and Research, 4(2), 575-582.

Ding, L., Antonucci, G., Venditti, M. (2025), Unveiling user responses to AI-powered personalised recommendations: A qualitative study of consumer engagement dynamics on Douyin. Qualitative Market Research: An International Journal, 28(2), 234-255.

Esperanza, D.N., Bithay, L.L., Jesus, J.B., Ople-Alviola, C., Sumilhig, J.M., Basilisco, G.L. (2025), Digital lending efficacy on debt management of wage earners. ASEAN Journal of Management and Innovation, 12(2), 111-127.

Florence, E.S., Fleischman, D., Mulcahy, R., Wynder, M. (2022), Message framing effects on sustainable consumer behaviour: A systematic review and future research directions for social marketing. Journal of Social Marketing, 12(4), 623-652.

Gani, M.O., Roy, H., Rahman, M.S., Faroque, A.R., Gupta, V., Prova, H.T. (2023), Effect of social media influence on consumer's purchase intention of organic beauty products: The role of customer's engagement and generativity. International Journal of Spa and Wellness, 6(1), 54-77.

Gross, J., Von Wangenheim, F. (2022), Influencer marketing on Instagram: Empirical research on social media engagement with sponsored posts. Journal of Interactive Advertising, 22(3), 289-310.

Haris, A. (2025), Consumer behavior shifts in digital age: Impact on brand loyalty. Advances: Jurnal Ekonomi dan Bisnis, 3(1), 38-51.

Haudi, H., Handayani, W., Musnaini, M., Suyoto, Y.T., Prasetio, T. (2022), The effect of social media marketing on brand trust, brand equity and brand loyalty. International Journal of Data and Network Science, 6(3), 961-972.

Inavolu, S.M. (2024), Exploring AI-driven customer service: Evolution, architectures, opportunities, challenges and future directions. International Journal of Engineering and Advanced Technology, 13(3), 156-163.

Irawan, D., Ady, S.U., Sayidah, N. (2024), Building brand trust: The role of AI-driven personalization and brand storytelling in strengthening brand authenticity perceptions. Journal of Economics, Management, Entrepreneurship, and Business (JEMEB), 4(2), 83-91.

Iyelolu, T.V., Agu, E.E., Idemudia, C., Ijomah, T.I. (2024), Improving customer engagement and crm for smes with AI driven solutions and future enhancements. International Journal of Engineering Research and Development, 20(8), 1150-1168.

Jesus, J., Zoilo, J., Alsola, M., Cortez-Roncales, M., Bontes, J., Pogado, M. (2025), Management accounting's effect on organizational performance: The dynamics of strategic decision making. Psychology and Education: A Multidisciplinary Journal, 41(9), 1051-1059.

Kapoor, P.S., Balaji, M.S., Jiang, Y. (2023), Greenfluencers as agents of social change: The effectiveness of sponsored messages in driving sustainable consumption. European Journal of Marketing, 57(2), 533-561.

Knight, H., Haddoud, M.Y., Megicks, P. (2022), Determinants of corporate sustainability message sharing on social media: A configuration

approach. Business Strategy and the Environment, 31(2), 633-647.

Komara, I., Juhana, A. (2025), The effect of AI-Generated content on brand identity consistency in social media: A systematic literature review. Journal of Mechatronics and Artificial Intelligence, 2(1), 31-44.

Lagbas, A. (2022), Visitation and perception of college students in selected urban parks in the city of Manila, Philippines. Ecosystems and Development Journal, 12(1), 25-42.

Lee, C.C., Pan, C., Song, Y. (2025), How live marketing affects green purchase in the age of artificial intelligence? Emerging Markets Finance and Trade, 61(1), 1-20.

Liadeli, G., Sotgiu, F., Verlegh, P.W. (2023), A meta-analysis of the effects of brands' owned social media on social media engagement and sales. Journal of Marketing, 87(3), 406-427.

Liza, M., Moscosa, L. (2023), Characteristics of Filipino Leaders Towards Organization Performance: A Meta-Analysis. Colorado: Ukiyoto Publishing.

Marmat, G. (2023), A framework for transitioning brand trust to brand love. Management Decision, 61(6), 1554-1584.

Meliawati, T., Gerald, S.C., Aruman, A.E. (2023), The effect of social media marketing Tiktok and product quality towards purchase intention. Journal of Consumer Sciences, 8(1), 77-92.

Pittman, M., Oeldorf-Hirsch, A., Brannan, A. (2022), Green advertising on social media: Brand authenticity mediates the effect of different appeals on purchase intent and digital engagement. Journal of Current Issues and Research in Advertising, 43(1), 106-121.

Ponce, S.B., Barry, M.M., Dizon, D.S., Katz, M.S., Murphy, M., Teplinsky, E., Markham, M.J. (2022), Netiquette for social media engagement for oncology professionals. Future Oncology, 18(9), 1133-1141.

Ramachandran, K.K., Suma, S., Banerjee, D., Mathew, B., Cheepurupalli, N.R., Mohan, C.R. (2024), The effectiveness of influencer marketing in the age of AI. Journal of Informatics Education and Research, 4(2), 1194-1203.

Rashidi-Sabet, S., Bolton, D.E. (2024), Commitment-trust theory in social media interactions: Implications for firms. Journal of Marketing Management, 40(13-14), 1300-1335.

Singh, R., Telukdarie, A., Mongwe, R. (2024), Digital social media influencers' impact on beauty and personal care purchases in South Africa. Platforms, 2(4), 193-210.

Sipos, D. (2025), The effects of AI-powered personalization on consumer trust, satisfaction, and purchase intent. European Journal of Applied Science, Engineering and Technology, 3(2), 14-24.

Venkateswaran, N. (2023), AI-driven personalization in customer relationship management: Challenges and opportunities. Journal of Theoretical and Applied Information Technology, 101(18), 7392-7399.

Yones, P.C.P., Muthaiyah, S. (2023), eWOM via the TikTok application and its influence on the purchase intention of somethinc products. Asia Pacific Management Review, 28(2), 174-184.