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The Mediating Role of Consumer Awareness in the Relationship Between Artificial Intelligence and Online Purchase Intention in South-East Nigeria

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ABSTRACT: The integration of Artificial Intelligence (AI) into the global e-commerce ecosystem is fundamentally transforming how consumers engage with digital retail platforms. In advanced economies, AI's ability to improve customer interaction, primarily through personalisation, predictive analytics, and automation, has been extensively documented. However, the extent to which these technologies influence consumer behaviour in emerging markets, particularly in Sub-Saharan Africa, remains unclear. Cultural norms, infrastructural constraints, and trust issues continue to slow down technology adoption, creating a unique behavioural environment that differs significantly from Western contexts.

The main goal was to mediate the role of consumer awareness in the relationship between artificial intelligence and online purchase intention in south-east nigeria. Specifically, the study aimed to: (1) investigate the direct effects of AI-driven personalisation, AI-enabled features (such as chatbots and virtual assistants), digital trust, and consumer attitudes toward AI on purchase intention. Using a sample of 384 online shoppers from the five states of South-East Nigeria, the study employed Partial Least Squares Structural Equation Modelling (PLS-SEM) to analyse the proposed relationships.

The findings shows that all four AI-related constructs exerted significant direct effects on purchase intention, with digital trust emerging as the strongest predictor. The study conlude that, in South-East Nigeria, AI influences consumer behaviour not only by increasing convenience or efficiency but also by improving consumers' understanding of products and processes. The study recommended amongs that Chatbots and virtual assistants should include explanatory prompts, product comparisons, and transparent reasoning.

Keywords: Artificial Intelligence, E-commerce, Consumer Awareness, Purchase Intention, Digital Trust, Nigeria, PLS-SEM.

INTRODUCTION

The integration of Artificial Intelligence (AI) into e-commerce has sparked a paradigm shift in online retailing, transitioning from transactional interfaces to personalised, predictive, and interactive experiences. Globally, AI technologies such as machine

learning algorithms, natural language processing-powered chatbots, and computer vision-driven visual search are transforming how consumers discover, evaluate, and purchase products (Huang & Rust, 2021; Davenport et al., 2020). In developed economies, the positive correlation between AI implementation and key performance indicators such as conversion rates and customer loyalty is well documented (Bilal et al., 2024; Huang & Rust, 2021).

However, this technological transformation unfolds unevenly across the globe. In emerging economies like Nigeria, particularly in the South-East region, a vibrant commercial hub comprising Anambra, Imo, Enugu, Abia, and Ebonyi states, the adoption of AI in e-commerce remains in its early stages. While internet penetration and smartphone usage are increasing, fostering a growing online shopping culture, significant barriers remain. These include infrastructural challenges, low digital literacy, and a deep-seated scepticism towards digital transactions, often stemming from privacy concerns and a lack of trust (Nwaiwu & Mgbemena, 2022). Consequently, the mechanisms by which AI influences consumer behaviour in this context are poorly understood, with the existing literature mainly focusing on direct effects in Western settings.

This study addresses a significant gap by proposing that AI's influence on purchase intention is not solely direct but is also substantially mediated through increased consumer awareness. While AI's capacity to personalise and assist is clear, its role in informing and educating consumers, thereby fostering confidence and shaping intentions, remains a less-explored area, especially in emerging markets. Consequently, this research develops and tests a comprehensive model that explores the direct impacts of AI-driven personalisation, AI-enabled features, digital trust, and consumer attitudes towards AI on online purchase intention, and importantly, investigates the mediating effect of consumer awareness within these relationships in the South-East Nigerian context.

LITERATURE REVIEW

Artificial Intelligence in E-commerce

AI encompasses machine learning, NLP, predictive analytics, and computer vision (Russell & Norvig, 2016). In online retail, these technologies support recommender systems, chatbots, dynamic pricing, visual search, and targeted advertising (Davenport et al., 2020). Personalisation plays a central role by tailoring product recommendations, reducing cognitive load, and boosting consumer engagement (Grewal et al., 2017; Moodley, 2025).

AI-Driven Personalisation

This involves using machine learning algorithms to analyse user data (browsing history, past purchases, demographics) to curate tailored product recommendations, content, and promotional offers. By increasing the perceived relevance of options, personalisation reduces information overload and decision fatigue, making the shopping experience more efficient and satisfying (Grewal et al., 2017).

AI-Enabled Features

This category includes tools like chatbots and virtual assistants that leverage Natural Language Processing (NLP) to provide real-time, 24/7 customer support. These features answer queries, offer product advice, and guide users through the purchase process, thereby delivering both utilitarian value (solving problems quickly) and hedonic value (creating an engaging, interactive experience) (Yin & Qiu, 2021).

Digital Trust

In the intangible realm of online shopping, digital trust is the bedrock of transactional relationships. It encompasses the consumer's confidence that the e-commerce platform will reliably protect their personal and financial data, fulfil delivery promises, and maintain transparent business practices (Habib, 2022). In contexts like South-East Nigeria, where concerns over cyber fraud and unreliable services are pronounced, establishing robust digital trust is not just beneficial but essential for overcoming initial hesitation to transact online and fostering repeat engagements.

Consumer Attitude towards AI

Drawing from the Theory of Planned Behaviour (Ajzen, 1991), attitude represents a key determinant of behavioural intention. A consumer's attitude towards AI is their overall evaluation, positive or negative, of interacting with AI technologies on shopping platforms. This attitude is shaped by perceptions of AI's usefulness (does it add value?) and ease of use (is it simple to interact with?). A favourable attitude lowers psychological barriers, increases the likelihood of adopting AI recommendations, and thus positively influences the intention to purchase.

Purchase Intention

Purchase intention refers to a consumer's deliberate, conscious plan and willingness to buy a particular product or service in the near future (Fishbein & Ajzen, 1975). Within e-commerce, it is widely recognised as the strongest and most immediate predictor of actual purchase behaviour because it captures the consumer's psychological readiness to act. It goes beyond mere curiosity or browsing; instead, it reflects a state where the consumer has weighed available information, perceived value, and potential risks and is ready to make a transaction.

In digital environments, purchase intention is particularly flexible, shaped by a complex mix of cognitive, emotional, and technological factors. Website usability, clarity of product information, perceived security, social proof, and pricing cues all play a role in strengthening or weakening intention. This fluidity is emphasised in the work of Nwankwo, Kanyangale, and Abugu (2019), who argue that online purchase decisions in emerging markets are susceptible to pre-purchase information search. Their study shows that the intensity and quality of online information seeking significantly predict purchase intention, and that consumers often rely on digital cues to make up for the absence of physical product inspection. They emphasise that information quality, trust signals, and system familiarity strongly influence how consumers move from intention to actual behaviour.

In today's AI-driven digital marketplace, technological enablers such as personalised recommendations, chatbots, and intelligent search systems further influence purchase intention by reducing uncertainty, enhancing convenience, and increasing the relevance of displayed options. These tools not only assist consumers in navigating vast product ranges but also deliver targeted information that supports decision-making, aligning with Nwankwo et al.'s (2019) assertion that informed consumers are more confident and more likely to proceed with a purchase.

Therefore, in the e-commerce environment, purchase intention arises as the combined result of technological experience, perceived value, trust, and informational clarity, making it a key concept for understanding consumer behaviour in both developed and developing markets.

Consumer Awareness as a Mediating Variable

In this study, consumer awareness extends beyond simple brand recognition. It denotes the extent of a consumer's knowledge and understanding of product attributes, available choices, promotional offers, and the functional capabilities of the AI tools on the platform. AI acts as a powerful amplifier of this awareness through targeted advertising, personalised product discovery, and interactive guidance from chatbots. We posit that this heightened state of awareness is a critical cognitive and informational pathway. It mediates the relationship between AI interactions and purchase intention by equipping consumers with the knowledge needed to make informed, confident decisions.

Theoretical Framework and Hypotheses Development

This study integrates three key theories: the Technology Acceptance Model (TAM), the Theory of Planned Behaviour (TPB), and the Unified Theory of Acceptance and Use of Technology (UTAUT). The combined framework suggests that perceived usefulness and ease of use of AI tools (from TAM) influence a consumer's attitude (from TPB) towards them. At the same time, UTAUT highlights the significance of facilitating conditions, with digital trust acting as a vital enabler. AI-driven personalisation and AI-enabled features are the central technological stimuli. The model indicates that these factors not only directly affect purchase intention but also increase consumer awareness, representing the cognitive aspect of decision-making. This synthesis offers a comprehensive approach to understanding how technological perceptions, social-psychological factors, and contextual enablers work together to influence behavioural intentions through an informed cognitive state. Based on this framework, the following hypotheses were proposed:

Direct Effects:
H_1: AI-driven personalisation has a significant positive effect on online consumer purchase intention.
H_2: AI-enabled features (e.g., chatbots, virtual assistants) have a significant positive effect on online consumer purchase intention.
H_3: Digital trust has a significant positive effect on online consumer purchase intention.
H_4: Consumer attitude towards AI has a significant positive effect on online consumer purchase intention.

Mediating Effects of Consumer Awareness:
H_5: Consumer awareness significantly mediates the relationship between AI-driven personalisation and online consumer purchase intention.
H_6: Consumer awareness significantly mediates the relationship between AI-enabled features and online consumer purchase intention.
H_7: Consumer awareness significantly mediates the relationship between digital trust and online consumer purchase intention.
H_8: Consumer awareness significantly mediates the relationship between consumer attitude towards AI and online consumer purchase intention.

The conceptual model

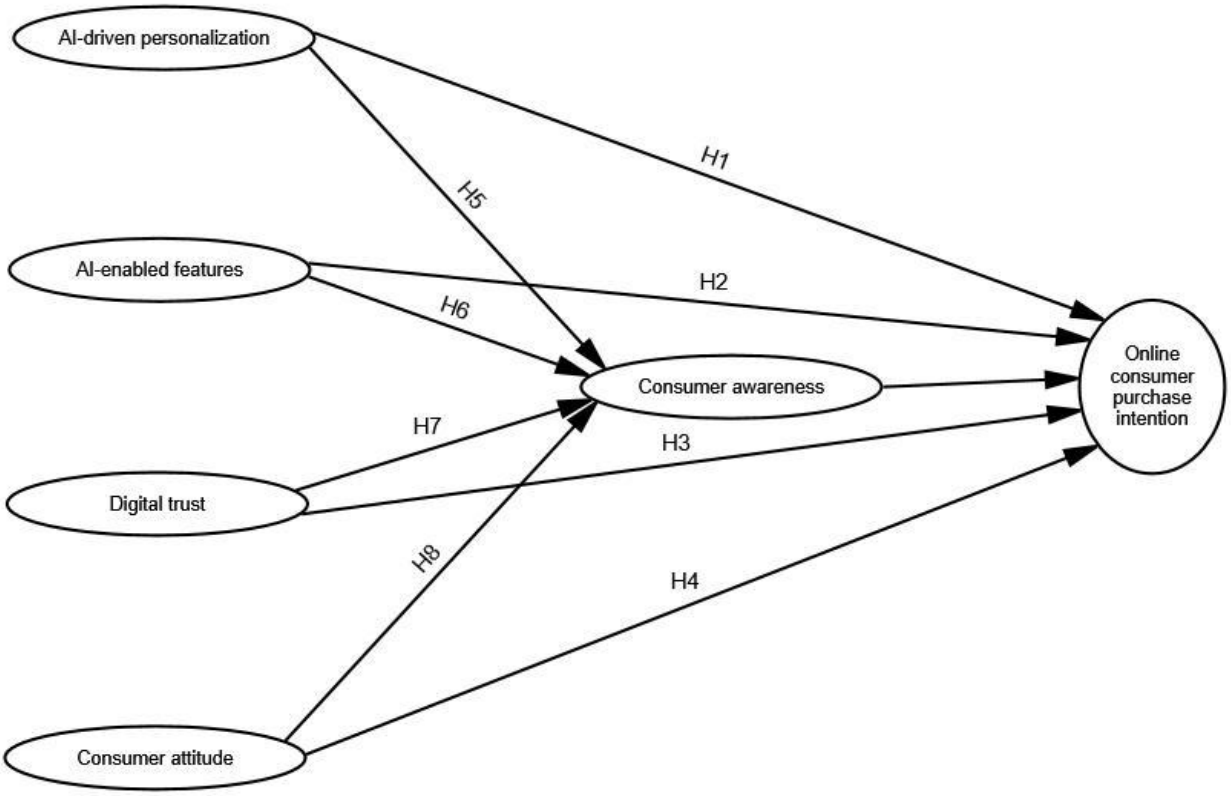


FIGURE 1
Source: Researcher's conceptualisation

METHODOLOGY

Research Design and Sampling

This study employed a quantitative, positivist research approach with a cross-sectional survey design, suitable for testing hypothesised relationships between defined variables. The target population was active online shoppers (aged 18 and above) in South-East Nigeria. Given the absence of a definitive sampling frame, a non-probability quota sampling technique was utilised to ensure representation from the major urban centres across the five states. The sample size was determined to be 384 using Cochran's formula for an infinite population (at a 95% confidence level and a 5% margin of error).

Data Collection and Measures

Data were collected over four weeks using a structured online questionnaire disseminated through social media platforms, online community forums, and professional networks targeting residents across the five states of South-East Nigeria. A total of 384 questionnaires were distributed, and after data screening for completeness and consistency, 303 were deemed valid and retained for analysis, representing a usable response rate of 78.9%. The measurement instrument consisted of multi-item scales adapted from established literature, each measured on a four-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (4). The constructs assessed were:

AI-Driven Personalisation (AIP)
AI-Enabled Features (AIF)

Digital Trust (DT)
Consumer Attitude towards AI (CAA)
Consumer Awareness (CA) - Mediating Variable
Online Purchase Intention (PI) - Dependent Variable

Data Analysis

Data analysis was conducted in two stages. First, preliminary analyses, including descriptive statistics and assessments of the measurement model (reliability, convergent validity, and discriminant validity), were conducted using SPSS v27. Second, the structural model was analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) in SmartPLS 4 software to test the hypothesised direct and mediating paths. The significance of the path coefficients and indirect effects was assessed using a bootstrapping procedure with 5000 subsamples.

RESULTS AND DISCUSSION OF FINDINGS

Table 1: Demographic Profile of Respondents

		Count	Column N %	Column Total N %
Gender	Male	172	56.8%	56.8%
	Female	131	43.2%	43.2%
Age	18-25 years	46	15.2%	15.2%
	26-33 years	87	28.7%	28.7%
	34-41 years	41	13.5%	13.5%
	42-49 years	88	29.0%	29.0%
	50 years and above	41	13.5%	13.5%
marital status	Single	86	28.4%	28.4%
	Married	154	50.8%	50.8%
	divorced/separated	63	20.8%	20.8%
Education	basic education	54	17.8%	17.8%
	ND/NCE	89	29.4%	29.4%
	HND/BSc	114	37.6%	37.6%
	Postgraduate	46	15.2%	15.2%

income size	below N100,000	42	13.9%	13.9%
	N101,000-N200,000	58	19.1%	19.1%
	N201,000-N300,000	104	34.3%	34.3%
	N301,000-N400,000	78	25.7%	25.7%
	401,000 and above	21	6.9%	6.9%

Source: Fieldwork 2025

Table Analysis: Socio-demographic Variables of Respondents

This section analyses the characteristics of the 303 valid respondents, shedding light on the demographic composition influencing online shopping behaviours in South-East Nigeria.

Interpretation of Gender Distribution: The slightly higher representation of male respondents (56.8%) compared to female respondents (43.2%) suggests greater involvement or a greater willingness among men to adopt and respond to online shopping experiences powered by AI.

Interpretation Age Range: The concentration of respondents aged 26–49 years (nearly 58%) suggests that the prime working-age population accounts for the bulk of online shoppers, likely due to economic independence and greater digital adaptability.

Interpretation: Married individuals constitute the majority, suggesting possible household-level purchase intentions. Divorced/separated respondents form a significant minority, possibly indicating independent shopping behaviour patterns.

The Educational Qualification: Notably, 82.2% of respondents possess post-secondary education, indicating a well-educated population that is more likely to understand and interact with AI features during online shopping.

Interpretation Monthly Income: The bulk of respondents earn between ₦201,000 and ₦400,000 (60%), suggesting middle-income earners who are likely motivated by value, convenience, and intelligent product recommendations when shopping online.

Measurement Model Assessment

The results confirmed the robustness and validity of the measurement model. As shown in Table 1, all constructs demonstrated high internal consistency reliability, with Cronbach's Alpha and Composite Reliability (CR) values exceeding the recommended threshold of 0.7. Convergent validity was established, as the Average Variance Extracted (AVE) for each construct exceeded the 0.5 benchmark.

Table 2: Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
AI-Driven Personalisation (AIP)	0.89	0.92	0.75
AI-Enabled Features (AIF)	0.87	0.91	0.72
Digital Trust (DT)	0.90	0.93	0.77

Consumer Attitude (CAA)	0.85	0.89	0.68
Consumer Awareness (CA)	0.88	0.91	0.71
Purchase Intention (PI)	0.91	0.94	0.80

Acceptable Thresholds: Cronbach's Alpha ≥ 0.70 , Composite Reliability ≥ 0.70

All constructs exceed the threshold for both metrics, indicating strong reliability. PI (Purchase intention) shows the highest internal consistency with a Cronbach's Alpha of 0.91 and CR of 0.94.

The relatively lower values (though still high) are for CAA (Cronbach's Alpha = 0.85), suggesting slightly less (but still acceptable) cohesion among items in that construct.

Conclusion on Reliability: All constructs demonstrate excellent reliability, indicating that the items within each construct are consistent and reliable.

Acceptable Threshold: AVE ≥ 0.50

All AVE values are well above the 0.50 threshold, suggesting that each construct exhibits strong convergent validity. PI again stands out with an AVE of 0.80, indicating that its items strongly represent the underlying construct. Even CAA, which has the lowest AVE (0.68), still meets the required criterion comfortably.

Conclusion on Convergent Validity: The constructs not only reliably measure their intended concepts but also strongly converge, indicating that the indicators appropriately capture the underlying latent variables. This foundational validation confirms that the measurement model is robust, paving the way for further structural analysis or hypothesis testing with confidence in the integrity of the constructs.

Table 3:Discriminant Validity (Fornell-Larcker Criterion)

Construct	**AIP**	**AIF**	**DT**	**CAA**	**CA**	**PI**
AIP	**0.866**	0.512	0.445	0.501	0.592	0.558
AIF	0.512	**0.849**	0.488	0.533	0.610	0.545
DT	0.445	0.488	**0.877**	0.567	0.524	0.601
CAA	0.501	0.533	0.567	**0.825**	0.589	0.624
CA	0.592	0.610	0.524	0.589	**0.843**	0.661
PI	0.558	0.545	0.601	0.624	0.661	**0.894**

Note: Diagonal elements (in bold) are the square root of the AVE.

The table above displays the discriminant validity assessment of six constructs: AIP, AIF, DT, CAA, CA, and PI using the Fornell-Larcker criterion. In this method, discriminant validity is confirmed when the square root of the Average Variance Extracted (AVE) for each construct (shown on the diagonal) exceeds its correlations with all other constructs (shown off-diagonal). This comparison ensures that each construct explains more variance in its own measurement items than in those of other constructs, thereby confirming that the constructs are empirically distinct.

Upon examination, all constructs in the table satisfy the Fornell-Larcker criterion. For instance, the square root of the AVE for AIP is 0.866, which exceeds its correlations with any other construct, including its highest correlation of 0.592 with CA. Similarly, AIF has a diagonal value of 0.849, surpassing its highest inter-construct correlation with CA of 0.610. This pattern is consistent across all constructs, with none of the off-diagonal correlations exceeding the square roots of their respective AVEs.

Notably, PI demonstrates the strongest discriminant validity, with a diagonal value of 0.894 and its highest correlation being 0.661 with CA. While this correlation is relatively high, it remains well below the threshold, confirming that PI is distinct from the other constructs. Similarly, constructs like DT (0.877 on the diagonal) and CAA (0.825) maintain clear separation from other constructs, despite moderate correlations with DT-PI (0.601) and CAA-PI (0.624).

Overall, the results provide robust evidence of discriminant validity across all measured constructs. This confirms that the constructs are not only internally consistent and convergently valid (as shown in the prior reliability and AVE analysis), but also empirically distinct from one another. This level of discriminant validity is critical in multivariate analyses, such as structural equation modelling, where construct overlap can compromise the clarity and interpretability of results. The clear separation among constructs ensures that each variable contributes uniquely to the model, enhancing the overall validity and reliability of the study's measurement framework.

Structural Model and Hypothesis Testing

The structural model was evaluated by examining the path coefficients (β), t-statistics derived from bootstrapping, and p-values. The results for the direct effects are presented in Table 3

.

Table 4:Direct Path Coefficients (Hypotheses H_1-H_4)

Hypothesis	Path	β-coefficient	t-value	p-value	Decision
H_1	AIP -> PI	0.24	3.12	0.002	Supported
H_2	AIF -> PI	0.19	2.45	0.014	Supported
H_3	DT -> PI	0.31	4.88	0.000	Supported
H_4	CAA -> PI	0.28	3.75	0.000	Supported

The results of the structural model provide strong evidence that all four AI-related constructs significantly influence online purchase intention among consumers in South-East Nigeria. This supports the theoretical foundations of TAM, TPB, and UTAUT, which underpin your study.

The following paragraphs examine each relationship in detail, connecting the statistical outcomes to the contextual and conceptual explanations in the uploaded thesis.

H_1: AI-driven Personalisation → Purchase Intention (β = 0.24, t = 3.12, p = 0.002)

The positive, significant effect of AI-driven personalisation on purchase intention indicates that consumers respond positively to personalised recommendations and customised shopping experiences. The result emphasises that personalisation lowers cognitive load, increases relevance, and boosts perceived value, thereby strengthening consumers' willingness to buy (Moodley, 2025; Yin et al., 2025). Personalisation also enhances familiarity and product awareness,

enabling consumers to see AI suggestions as helpful rather than intrusive. This finding aligns well with the South-East Nigeria context, where consumers value convenience and decision support due to the challenges of information overload and inconsistent online product quality. The significant β-coefficient indicates that when AI systems offer tailored product options, consumers' purchase intentions increase.

H_2: AI-enabled Features (Chatbots, Virtual Assistants) → Purchase Intention (β = 0.19, t = 2.45, p = 0.014)

AI-enabled features, such as chatbots and virtual assistants, also significantly influence purchase intention. Their ability to provide real-time support, reduce uncertainty, and guide consumers through the shopping process helps improve confidence during online transactions. As the study explains, chatbots enhance both utilitarian value (efficiency, clarity of product information) and hedonic value (enjoyable interactions), both of which positively shape purchase intention (Gao et al., 2025; Cheng et al., 2024). In the South-East Nigerian setting, where customer service gaps and delayed responses are common, AI-enabled assistants provide a sense of reassurance. Their availability and responsiveness help counter concerns about fraud, misinformation, and platform unreliability, which are often reported by Nigerian online shoppers. Thus, the supported hypothesis confirms the role of AI features in strengthening consumer motivation to complete purchases.

H_3: Digital Trust → Purchase Intention (β = 0.31, t = 4.88, p = 0.000)

Digital trust has the most substantial direct influence on purchase intention among all the constructs. Since consumers cannot physically examine products in online settings, trust is essential for reducing perceived risks, boosting confidence in automated systems, and encouraging reliance on AI-powered recommendations (Habib, 2022; Wang et al., 2022). In South-East Nigeria, where online fraud, delivery issues, and counterfeit goods are common, digital trust is even more vital. The high β-coefficient shows that when consumers believe an AI-supported platform is secure, transparent, and dependable, they are much more inclined to make a purchase, illustrating how trust shifts consumers from a risk-avoidance attitude to a value-driven engagement.

H_4: Consumer Attitude toward AI → Purchase Intention (β = 0.28, t = 3.75, p = 0.000)

Consumer attitudes towards AI significantly influence purchase intentions. A positive perception shaped by beliefs about usefulness, ease of use, enjoyment, and credibility encourages greater adoption of AI-enhanced shopping. Favourable attitudes reduce scepticism, enhance perceived behavioural control, and ultimately increase the likelihood of buying (Zirena-Bejarano & Chavez Zirena, 2024; Koththagoda & Herath, 2019). In South-East Nigeria, positive attitudes often reflect growing exposure to AI tools and increasing familiarity with e-commerce platforms such as Jumia and Konga. The strong significance of H_4 shows that as consumers become more comfortable and less anxious about AI, they are more inclined to trust recommendations and proceed with purchases.

According to Table 4, AI personalisation, AI-enabled features, digital trust, and consumer attitude toward AI all emerge as strong and significant drivers of purchase intention. These results highlight that AI shapes consumer behaviour both cognitively by improving awareness, reducing uncertainty, and building trust, and affectively, through positive attitudes and engaging user experiences. In an emerging market like

South-East Nigeria, the findings indicate that AI technologies can meaningfully boost online shopping engagement by addressing trust deficits, improving access to information, and filling service gaps that often hinder online transactions.

Table 4: Mediation Analysis (Hypotheses H_5-H_8)

Hypothesis	Indirect Path	β-coefficient	t-value	p-value	Decision
H_5	AIP -> CA -> PI	0.11	2.21	0.027	Supported
H_6	AIF -> CA -> PI	0.13	2.58	0.010	Supported
H_7	DT -> CA -> PI	0.09	2.05	0.041	Supported
H_8	CAA -> CA -> PI	0.12	2.43	0.015	Supported

The mediation analysis demonstrates that consumer awareness (CA) plays a meaningful and statistically significant role in explaining how AI-related constructs translate into purchase intention among online shoppers in South-East Nigeria. Each indirect path provides insight into how awareness functions as the cognitive link between exposure to AI tools and the willingness to buy.

H_5: AIP → CA → PI (β = 0.11, t = 2.21, p = 0.027)

AI-driven personalisation influences purchase intention more strongly when consumers understand how personalised suggestions are generated. Awareness helps users interpret customised recommendations as relevant, helpful, and tailored to their needs, rather than random or intrusive. This understanding reduces decision fatigue, improves product familiarity, and increases confidence in the platform's ability to guide them correctly. The significant mediation effect indicates that when consumers recognise the purpose and value of AI personalisation, they are more willing to act on the recommendations provided.

H_6: AIF → CA → PI (β = 0.13, t = 2.58, p = 0.010)

The indirect influence of AI-enabled features demonstrates that tools such as chatbots and virtual assistants help increase purchase intention by enhancing consumers' understanding of platform capabilities. When users realise that these tools can offer instant guidance, clarify product details, and provide real-time support, they become more confident and more inclined to make a purchase. Awareness boosts the perceived usefulness and trustworthiness of AI-powered assistance, transforming routine interactions into meaningful support that encourages buying behaviour. The importance of this pathway underscores that understanding the role and operation of AI features amplifies their behavioural impact.

H_7: DT → CA → PI (β = 0.09, t = 2.05, p = 0.041)

Digital trust influences purchase intention partly by boosting consumer awareness. When users feel secure about privacy, payment systems, and platform credibility, they tend to explore more features and engage more deeply with AI tools. This exposure naturally enhances understanding of how the system works and how it supports decision-making. In environments where online fraud and misinformation are common concerns, trust creates the psychological safety needed for learning and exploration. The significant mediation effect shows that awareness develops in contexts where trust is established, and this increased awareness further strengthens the consumer's intention to purchase.

H_8: CAA → CA → PI (β = 0.12, t = 2.43, p = 0.015)

A positive attitude towards AI encourages users to engage more frequently and openly with AI-powered tools. This increased interaction naturally enhances understanding and awareness of how AI supports the shopping experience. Awareness then acts as the conduit through which positive attitudes translate into stronger behavioural intentions. When consumers are enthusiastic, curious, or receptive towards AI, they are more inclined to explore product recommendations, automated suggestions, and platform features, thereby boosting their willingness to purchase. The mediated relationship confirms that attitudes influence behaviour primarily by shaping awareness.

In summary, across all four pathways, consumer awareness emerges as a consistent and reliable mechanism that strengthens AI technologies' influence on purchase intention. It helps consumers interpret AI outputs confidently, reduces uncertainty within digital environments, clarifies the value of AI-enabled services, and transforms passive interaction into informed decision-making. In the South-East Nigerian context, where digital literacy varies and trust challenges are common, awareness becomes even more crucial. It functions simultaneously as a risk reducer and a value enhancer, enabling AI technologies to fully and as expected influence consumers' willingness to buy online.

Discussion of Findings

The findings of this study reveal clear and consistent patterns in how AI technologies influence consumers' online purchase intentions in South-East Nigeria. The direct effects indicate that AI-driven personalisation, AI-enabled features, digital trust, and consumer attitudes towards AI significantly predict purchase intentions (H_1–H_4). These results align with broader research suggesting that AI enhances decision-making by providing personalised recommendations, reducing cognitive load, and improving the overall shopping experience (Huang & Rust, 2021; Grewal et al., 2017). Importantly, the strong influence of digital trust ($\beta = 0.31$) highlights the central role of trust in online environments where consumers cannot physically inspect products. This is consistent with findings from Habib (2022), who emphasises that trust reduces perceived risk linked to digital transactions and increases willingness to buy.

The mediation results (H_5–H_8) offer greater insight into how AI influences behaviour. Consumer awareness consistently mediated all AI-purchase intention pathways, showing that awareness is a vital mental link that helps consumers understand, value, and act on AI-driven interactions. Personalisation improves awareness by exposing consumers to a broader range of relevant options, while AI-enabled features lessen uncertainty by clarifying product information and providing real-time guidance. This finding supports the argument by Nwankwo, Kanyangale, and Abugu (2019), who state that informed consumers make more confident decisions in online marketplaces. In South-East Nigeria, where digital literacy levels vary and trust is often low, awareness plays a dual role: it decreases perceived risk. It increases the perceived value of digital interactions.

The results indicate that AI influences purchase intention not only through the quality of its technological functions but also via consumers' understanding of how these technologies enhance their decision-making. This emphasises that AI must be both functional and informative to effectively influence consumer behaviour in emerging markets.

CONCLUSION

This study concludes that AI technologies significantly shape online purchase behaviour in South-East Nigeria, both directly and indirectly. AI-driven personalisation, AI-enabled features, digital trust, and consumer attitudes toward AI all have substantial direct effects on purchase intention. However, the critical insight from this research is that consumer awareness serves as a powerful mediating mechanism. AI enhances purchase intention most effectively when it not only simplifies tasks or increases convenience but also improves consumers' understanding of product options, platform functionalities, and overall shopping processes. The integration of technology acceptance (TAM), planned behaviour (TPB), and technology adoption (UTAUT) theories within the model further validates the behavioural pathways through which consumers adopt AI-supported systems. The findings highlight that for AI to achieve its full potential in emerging markets, e-commerce platforms must ensure that technological interactions elevate awareness, build trust, and strengthen positive attitudes toward AI-enabled shopping. However, the study made the following recommendations:

1. Chatbots and virtual assistants should include explanatory prompts, product comparisons, and transparent reasoning ("Why am I seeing this recommendation?"). This approach fosters awareness and, consequently, boosts purchase intention.
2. Platforms should implement explainable AI principles that clarify how personalisation functions, fostering trust and reducing perceptions of manipulation. This approach supports calls for transparent AI use in marketing.
3. Because digital trust has a strong impact, platforms should clearly display security certificates, return policies, buyer protection schemes, and identity verification procedures.
4. Short tutorials, demo videos, and interactive guides can help consumers understand platform features and reduce fear of technological complexity.

Implications for the Study

For online retailers: The results suggest that AI tools must do more than just automate tasks and offer convenience; they should also guide, inform, and reassure consumers. Managers ought to integrate awareness-raising cues into the user journey, such as pop-up explanations, onboarding prompts, and personalised tips. Personalisation engines should be fine-tuned to mirror user behaviour patterns in Nigeria, where trust issues and scepticism towards unfamiliar sellers are prevalent.

For Policymakers and Regulators: Digital literacy programmes should include modules on AI-enabled shopping, safe online practices, recognising trustworthy platforms, and understanding automated decision-making systems. Enhancing awareness among the population will support wider e-commerce adoption and economic growth.

For Developers and System Designers: Product teams should implement human-centred AI design principles that include user education, risk mitigation, and behavioural feedback loops. AI tools should be developed to address infrastructural limitations common in emerging markets, such as unreliable networks or low-end devices.

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