THE EFFECT OF AI-DRIVEN PERSONALIZED MARKETING ON CONSUMER PURCHASE DECISIONS: EVIDENCE FROM THE FASHION INDUSTRY

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ABSTRACT

This study explores the impact of AI-driven personalized marketing on consumer behavior in the fashion industry, focusing on purchase decisions and intentions. Using a quantitative approach, data from 350 respondents were analyzed to examine direct, mediated, and moderated relationships among key variables. The results reveal that AI-driven personalized marketing significantly influences consumer purchase decisions and intentions, highlighting its effectiveness in aligning with consumer preferences. Message relevance and brand loyalty are confirmed as mediators, demonstrating their critical roles in enhancing the impact of personalization strategies. Additionally, consumer trust in AI moderates the relationship between AI-driven marketing and purchase decisions, amplifying its effect when trust levels are high. These findings contribute to the theoretical understanding of personalized marketing by integrating mediating and moderating variables, offering a nuanced perspective on consumer engagement. Practically, the study emphasizes the importance of building trust, delivering relevant messages, and fostering loyalty to optimize marketing strategies in the fashion industry. The research provides actionable insights for businesses aiming to leverage AI-driven personalization to drive both short-term sales and long-term consumer engagement in a competitive digital marketplace.

Keywords: AI-driven marketing, personalized marketing, consumer behavior, brand loyalty, consumer trust

INTRODUCTION

The rapid advancements in artificial intelligence (AI) have transformed the marketing landscape, enabling businesses to deliver highly personalized and data-driven experiences to consumers. AI-driven personalized marketing leverages machine learning and big data analytics to craft tailored recommendations, targeted advertisements, and customized shopping experiences (Feng, 2024). In the fashion industry, where trends shift rapidly and consumer preferences are diverse, personalization has become a critical tool for engaging consumers and driving sales. Personalized marketing not only captures attention but also fosters a sense of relevance and trust, significantly influencing purchase behaviors (Chandra et al., 2022) (Suleman et al., 2021). Despite its growing adoption, the effectiveness of AI-driven personalized marketing in shaping consumer purchase decisions remains underexplored, particularly in the context of the fashion industry.

Indonesia, as one of Southeast Asia's largest fashion markets, presents a unique opportunity to examine the impact of AI-driven personalized marketing. The Indonesian fashion industry, driven by its diverse cultural heritage and growing e-commerce sector, has experienced significant growth over the past decade (Thien Duc & Mujahida, 2024). According to Statista, Indonesia's online fashion market is expected to generate substantial revenue growth, fueled by the increasing adoption of digital platforms and AI technologies. With over 75% of Indonesian consumers actively engaging in e-commerce, personalized marketing has emerged as a key strategy for brands to stand out in a competitive market. However, local fashion brands often face challenges in leveraging AI effectively due to limited technological infrastructure and varying levels of consumer trust in AI systems.

Existing studies on personalized marketing often focus on traditional methods or single aspects of AI-driven strategies, such as recommendation systems or dynamic (Luo et al., 2022). However, the holistic impact of AI-driven personalization—combining tailored content, predictive analytics, and real-time adaptability—on consumer purchase decisions in Indonesia remains underexplored. Moreover, while the role of personalization in enhancing consumer satisfaction has been established, its impact on consumer trust, loyalty, and actual purchase decisions in Indonesia's dynamic fashion market remains ambiguous. This gap in the literature highlights the need for a comprehensive investigation into how AI-driven personalized marketing influences consumer purchase decisions and intentions in the Indonesian fashion industry.

Adding to this complexity, consumer trust in AI and the relevance of personalized marketing messages are emerging as critical factors influencing the success of such strategies. While research has examined the general role of trust in marketing, few studies explore its moderating effect on the relationship between AI-driven personalization and consumer behaviors (Song & Lin, 2024). Similarly, the mediating role of message relevance and brand loyalty in driving purchase decisions remains under-researched, particularly in fashion, where emotional connections and perceived alignment with personal style are key determinants of consumer behavior (Andrade & Tumelero, 2022) (Suleman, Sabil, et al., n.d.; Suleman, Supiandi, et al., 2023). Addressing these gaps, this study aims to provide a deeper understanding of the mechanisms through which AI-driven personalized marketing influences consumer purchase decisions, with a particular focus on Indonesia's fashion industry.

The novelty of this research lies in its integrated approach, examining not only the direct effects of AI-driven personalized marketing on consumer purchase decisions but also the mediating roles of message relevance and brand loyalty, as well as the moderating role of consumer trust in AI. By focusing on Indonesia's fashion industry, the study sheds light on a context where personalization is both highly valued and challenging to implement due to rapidly changing trends, diverse consumer preferences, and varying levels of trust in AI systems. The findings will contribute to the theoretical understanding of AI applications in personalized marketing and offer

practical insights for Indonesian fashion brands seeking to optimize their strategies in a competitive digital marketplace.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

AI in Marketing

Artificial Intelligence (AI) has revolutionized marketing by enabling data-driven strategies that cater to individual consumer needs. AI applications in marketing include predictive analytics, recommendation systems, and real-time personalization, which allow businesses to create tailored experiences (Feng, 2024). AI-powered tools, such as chatbots and virtual assistants, enhance customer engagement by providing instant support and personalized recommendations (Luo et al., 2022). In e-commerce, AI has been shown to improve marketing efficiency by predicting consumer behavior and automating targeted campaigns (Zelda et al., 2024)(Rukiastiandari et al., 2023).

Despite these advancements, challenges remain, such as consumer mistrust of AI systems and concerns about data privacy (Huang et al., 2023). Research highlights that while AI enhances marketing precision, its success depends on consumer acceptance and trust. Particularly in industries like fashion, where aesthetic preferences and emotional connections influence behavior, understanding how AI influences consumer decisions is crucial. This study addresses the gap by exploring the role of AI in personalized marketing and its impact on consumer purchase behavior in the fashion industry.

Personalized Marketing

Personalized marketing refers to strategies that tailor content, recommendations, and offers to individual consumers based on their preferences, behaviors, and demographics (Jha et al., 2022; Mujahida et al., 2024). AI has made personalized marketing more scalable and efficient, allowing businesses to analyze vast datasets and deliver real-time personalized experiences. Personalized marketing increases consumer satisfaction and engagement by making interactions more relevant and meaningful (Chandra et al., 2022)(Herawaty et al., 2022; Suleman, Zuniarti, et al., 2023).

In the fashion industry, personalized marketing plays a vital role due to the diversity of consumer preferences and the dynamic nature of trends. For instance, AI-driven recommendation systems can suggest clothing and accessories that match a consumer’s style and past purchases, enhancing the likelihood of purchase (Yaswanthraj et al., 2024). However, while the benefits of personalization are well-documented, its effectiveness in influencing purchase decisions, particularly in fashion, remains underexplored. This study examines how personalized marketing impacts both purchase intentions and decisions, contributing to the literature on AI-driven strategies.

Brand Loyalty

Brand loyalty is a critical outcome of effective marketing strategies, reflecting a consumer's commitment to repeatedly purchase from a specific brand (Andrade & Tumelero, 2022; Bawazir et al., 2024; Mujahida et al., 2024). Loyalty is influenced by trust, satisfaction, and perceived value, and it plays a significant role in driving long-term business success. Research shows that personalized marketing fosters brand loyalty by creating emotional connections and demonstrating a brand's understanding of consumer needs (Zelda et al., 2024).

In the context of AI-driven marketing, loyalty is enhanced when consumers perceive personalization as authentic and valuable. Loyal customers are more likely to engage with personalized recommendations and remain committed to the brand, even in competitive markets. However, the mediating role of brand loyalty in the relationship between AI-driven personalized marketing and consumer purchase behavior has received limited attention in the literature. This study explores how personalized marketing fosters loyalty and how that, in turn, influences purchase decisions, particularly in the fashion industry.

Consumer Trust

Consumer trust refers to the confidence consumers have in the ability of a system or brand to deliver reliable, secure, and beneficial experiences (Ilmi et al., 2023). In the context of AI-driven personalized marketing, trust is a critical factor influencing the effectiveness of marketing strategies. When consumers trust the AI system, they are more likely to perceive personalized recommendations as credible and valuable, enhancing their engagement and likelihood of purchase (Huang et al., 2023). Conversely, a lack of trust can lead to skepticism, reducing the impact of personalized marketing efforts. Trust is particularly relevant in industries like fashion, where subjective preferences and personal style play a significant role in purchase decisions (Andrade & Tumelero, 2022).

Building consumer trust in AI requires transparency about how data is collected and used, as well as the ability of the system to provide consistent and accurate recommendations. Studies highlight that consumers are more likely to trust AI systems that demonstrate ethical practices, such as respecting data privacy and avoiding biases in personalization (Luo et al., 2022)(Suleman, Nurhayaty, et al., n.d.). Moreover, trust moderates the relationship between AI-driven personalized marketing and consumer behavior, amplifying the positive effects of personalization when trust is high (Zelda et al., 2024). This study addresses the role of consumer trust in influencing the success of AI-driven marketing strategies, exploring its moderating effect on purchase decisions and intentions within the fashion industry.

Consumer Purchase Decision and Intention

Consumer purchase intention refers to the likelihood of a consumer buying a product (Sumaji et al., 2024), while purchase decisions represent the actual buying action. Both are

influenced by marketing strategies, perceived relevance, and external factors like price and availability (Huang et al., 2023). Research suggests that personalized marketing bridges the gap between intention and decision by making recommendations more relevant and credible (Luo et al., 2022).

In fashion, where decisions are often driven by emotional and aesthetic considerations, personalized marketing can play a pivotal role in influencing consumer (Jha et al., 2022). Tailored recommendations reduce decision fatigue and increase the likelihood of purchase by aligning with consumer preferences (Chandra et al., 2022). However, while intentions are frequently studied in marketing literature, the transition from intention to actual purchase in the context of AI-driven personalization remains underexplored. This study investigates how AI-driven personalized marketing affects both purchase intentions and decisions, contributing to a deeper understanding of consumer behavior in the fashion industry.

Drawing upon insights from the literature review, we have developed a comprehensive research framework that integrates the key variables and relationships explored in this study. The framework is presented in the figure below and serves as the foundation for investigating the influence of AI-driven personalized marketing on consumer behavior in the fashion industry.

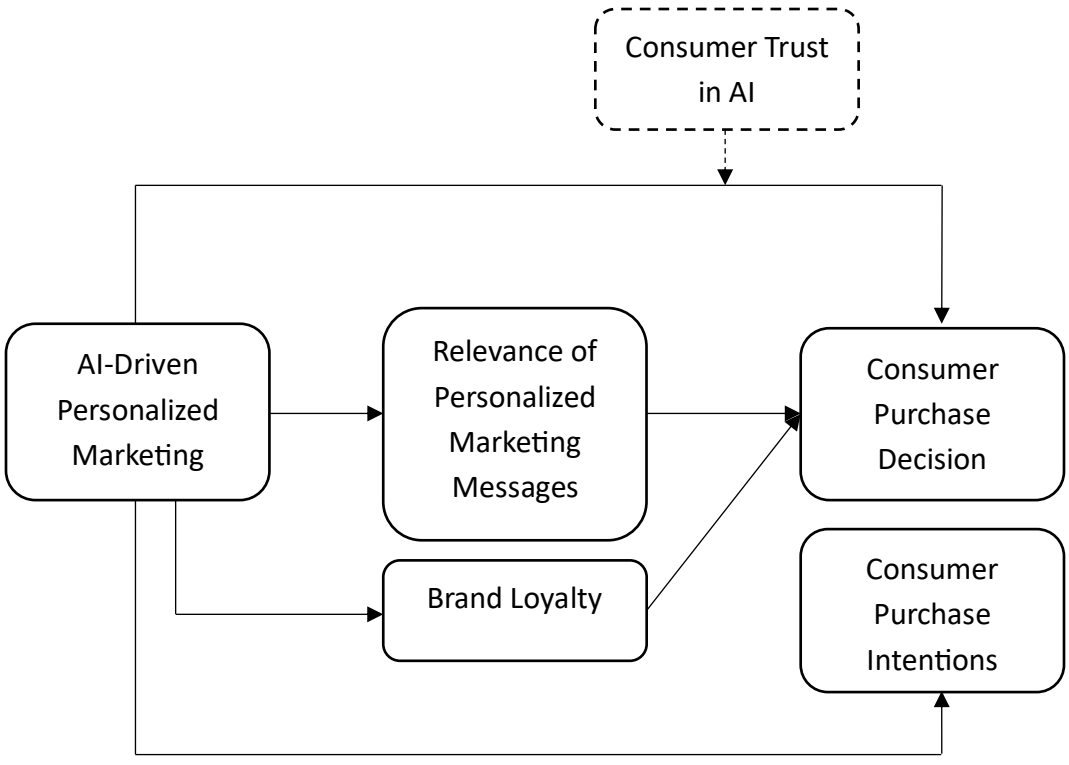


Figure 1. Research Framework

AI-Driven Personalized Marketing and Consumer Purchase Decisions

Personalized marketing has become a cornerstone of modern marketing strategies, driven by the increasing capabilities of artificial intelligence (AI). AI-driven personalized marketing utilizes machine learning algorithms and big data analytics to create customized recommendations, offers, and experiences tailored to individual consumer preferences (Feng, 2024). Such personalization enhances the relevance of marketing efforts, making consumers feel valued and understood, which directly impacts their purchase decisions (Chandra et al., 2022). In the fashion industry, personalization is particularly critical due to the diversity of consumer tastes and rapidly changing trends. When consumers receive recommendations or offers that align with their preferences, they are more likely to proceed with a purchase (Zelda et al., 2024)(Suleman, Suyoto, et al., n.d.).

Previous studies indicate that consumers are more likely to trust and act on recommendations when they perceive them as personalized and relevant (Luo et al., 2022). By leveraging AI to deliver such experiences, brands can influence consumer purchase decisions effectively. Therefore, we hypothesize:

H1: AI-driven personalized marketing has a positive and significant effect on consumer purchase decisions in the fashion industry.

The Mediating Role of Message Relevance

The relevance of personalized marketing messages is a critical factor influencing their effectiveness. Message relevance refers to how well the content aligns with the consumer's interests, preferences, and needs (Huang et al., 2023). AI-driven marketing enhances relevance by analyzing consumer data and generating tailored content that resonates with individual buyers. When messages are perceived as relevant, consumers are more likely to engage with them, leading to higher trust and eventual purchase decisions (Jha et al., 2022).

In the fashion industry, where consumers are constantly exposed to a plethora of options, message relevance helps brands stand out and build stronger connections with their audience. Relevance also reduces decision fatigue, as consumers are presented with options that match their preferences (Yaswanthraj et al., 2024). Given its pivotal role, we hypothesize:

H2: The relevance of personalized marketing messages mediates the relationship between AI-driven personalized marketing and consumer purchase decisions.

The Moderating Role of Consumer Trust in AI

Consumer trust in AI plays a significant role in determining the effectiveness of AI-driven personalized marketing. Trust in AI reflects the consumer's confidence in the system's ability to provide accurate, secure, and beneficial recommendations. When consumers trust AI, they are more likely to perceive personalized marketing messages as credible and act on them. Conversely,

low trust in AI can lead to skepticism, reducing the impact of personalized marketing on purchase decisions (Andrade & Tumelero, 2022).

Trust in AI is particularly important in the fashion industry, where purchasing decisions often involve subjective preferences and personal style. By building trust, brands can enhance the perceived value of AI-driven personalization and encourage consumers to act on tailored recommendations. Therefore, we hypothesize:

H3: Consumer trust in AI moderates the relationship between AI-driven personalized marketing and consumer purchase decisions, such that the effect is stronger when trust in AI is high.

AI-Driven Personalized Marketing and Consumer Purchase Intentions

Purchase intentions represent the likelihood of a consumer buying a product in the future. AI-driven personalized marketing influences purchase intentions by creating a seamless and engaging shopping experience that aligns with consumer preferences (Bunea et al., 2024). Personalized offers and recommendations enhance consumer satisfaction and increase the likelihood of purchase (Chandra et al., 2022). In the fashion industry, where consumers seek unique and relevant products, personalized marketing significantly drives purchase intentions (Feng, 2024).

By understanding consumer preferences and delivering tailored solutions, AI-driven personalized marketing bridges the gap between consumer expectations and brand offerings, thus influencing purchase intentions. We hypothesize:

H4: AI-driven personalized marketing has a positive and significant effect on consumer purchase intentions in the fashion industry.

The Mediating Role of Brand Loyalty

Brand loyalty mediates the relationship between AI-driven personalized marketing and consumer purchase decisions. Personalized marketing fosters stronger emotional connections between consumers and brands, encouraging repeat purchases and long-term loyalty (Luo et al., 2022). When consumers feel that a brand understands their needs and preferences, they are more likely to remain loyal, which subsequently increases their purchase decisions (Zelda et al., 2024).

In the fashion industry, where consumer-brand relationships are often built on trust and satisfaction, personalized marketing plays a pivotal role in nurturing loyalty. Loyal customers are not only more likely to purchase but also act as advocates for the brand. Therefore, we hypothesize:

H5: Brand loyalty mediates the relationship between AI-driven personalized marketing and consumer purchase decisions.

RESEARCH METHOD

This study employs a quantitative approach to explore the effects of AI-driven personalized marketing on consumer purchase decisions and intentions in the fashion industry. Data were collected through a structured survey distributed to 350 respondents, focusing on individuals with experience in interacting with AI-driven marketing strategies such as personalized recommendations, targeted advertisements, or curated shopping experiences.

The target population included active consumers of fashion products who had recently interacted with AI-based marketing tools in Indonesia. Respondents were recruited through online platforms and social media to ensure diversity in age, gender, and geographic location. A total of 350 valid responses were collected. Each respondent provided informed consent, ensuring the ethical collection of data.

To measure the variables, the survey instrument included items adapted from validated scales in prior research. Each construct was operationalized using multiple dimensions, as detailed in Table 1 below:

Table 1. Operational Variables

Construct	Dimension	Source
AI-Driven Personalized Marketing	Personalization Accuracy	Feng (2024)
	Content Relevance	
	Timeliness	
Consumer Purchase Decisions	Satisfaction with Decision	Huang et al (2023)
	Alignment with Preferences	
	Ease of Purchase	
Consumer Purchase Intentions	Likelihood of Future Purchase	Jha et al. (2022)
	Interest in Recommended Products	
	Intent to Revisit	
Message Relevance	Personal Alignment	Yaswanthraj et al (2024)
	Usefulness	
	Trustworthiness	
Brand Loyalty	Emotional Connection	Andrade & Tumelero (2022)
	Repeat Purchase Intention	
	Brand Advocacy	
Consumer Trust in AI	Accuracy	Demir (2024)
	Transparency	
	Perceived Reliability	

The constructs were evaluated using a Confirmatory Factor Analysis (CFA) to assess reliability and validity. Reliability was measured using Cronbach's alpha and Composite Reliability (CR), with acceptable thresholds set at 0.70 and 0.85, respectively. Validity was tested through Average Variance Extracted (AVE), where values above 0.50 indicated sufficient

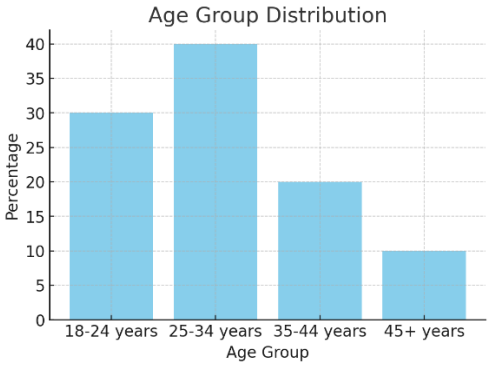
convergent validity. Discriminant validity was confirmed using the Fornell-Larcker criterion, ensuring that the square root of AVE for each construct was greater than its correlations with other constructs.

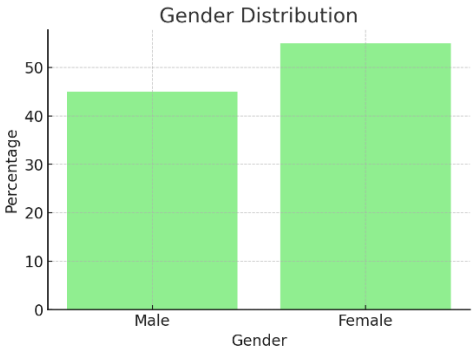
The structural model was evaluated using several fit indices to ensure its adequacy and robustness. The Goodness-of-Fit (GoF) achieved a value of 0.68, indicating a strong overall model fit. The Chi-Square (χ^2) test demonstrated a non-significant value, further confirming the model's adequacy. The Comparative Fit Index (CFI) recorded a value of 0.93, exceeding the recommended threshold of 0.90, which indicates excellent model fit. Additionally, the Root Mean Square Error of Approximation (RMSEA) was 0.05, falling below the acceptable threshold of 0.08, thereby confirming a good fit. Finally, the Standardized Root Mean Square Residual (SRMR) achieved a value of 0.04, which is well within the acceptable range of less than 0.08, signifying the model's reliability and suitability for analysis.

Data were analyzed using Structural Equation Modeling (SEM) in SmartPLS 4. Bootstrapping with 5,000 resamples was employed to assess the significance of path coefficients, indirect effects, and moderating influences. This comprehensive approach ensures the robustness and reliability of the findings.

RESULT AND DISCUSSION

The respondent profile provides an overview of the demographic distribution of the study's participants. As illustrated in the figures, the age group distribution indicates that the majority of respondents fall within the 25-34 years category, accounting for 40% of the total sample. This is followed by the 18-24 years group at 30%, reflecting a significant representation of younger individuals. The 35-44 years group constitutes 20%, while the 45+ years group comprises the smallest proportion, at 10%. These figures suggest that the primary participants are young to middle-aged adults, a demographic often targeted by personalized marketing in the fashion industry.





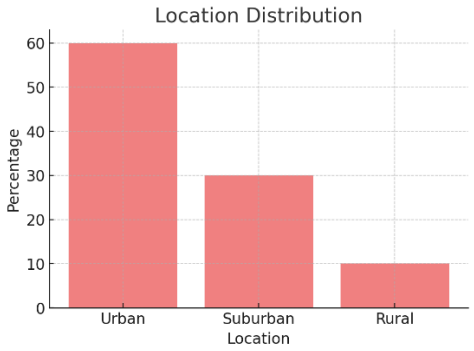


Figure 2. Respondent's Details

Source: data processing, 2024

The gender distribution reveals a slight dominance of female respondents, who represent 55% of the sample, compared to 45% male respondents. This finding aligns with the typical consumer behavior in the fashion industry, where women are often more engaged in shopping activities and more responsive to personalized marketing strategies.

Regarding location, the majority of respondents reside in urban areas (60%), followed by suburban residents at 30% and rural residents at 10%. The high representation of urban participants reflects the concentration of fashion retailers and digital marketing initiatives in metropolitan regions, where access to AI-driven personalized marketing is more prevalent. This demographic profile underscores the importance of targeting urban and suburban consumers for effective AI-driven marketing in the fashion sector.

Table 2. Descriptive Statistics

Variables	Mean	Standard Deviation	Minimum	Maximum
AI-Driven Personalized Marketing	4.35	0.85	1	6
Consumer Purchase Decisions	4.5	0.75	2.5	6
Consumer Purchase Intentions	4.55	0.8	2	6
Message Relevance	4.4	0.78	2.5	6
Brand Loyalty	4.65	0.7	3	6
Consumer Trust in AI	4.25	0.9	1	5.5

Source: data processing, 2024

Table 2 reveals generally positive perceptions of AI-driven personalized marketing. AI-Driven Personalized Marketing scored a mean of 4.35, indicating favorable views, though variability suggests differing experiences. Consumer Purchase Decisions (mean = 4.50) and Intentions (mean = 4.55) highlight strong satisfaction and likelihood of future purchases, with consistent responses. Message Relevance (mean = 4.40) and Brand Loyalty (mean = 4.65) reflect

high alignment with consumer interests and strong emotional connections, respectively. However, Consumer Trust in AI had the lowest mean (4.25) and the highest variability, signaling trust as an area for improvement. Overall, the findings emphasize the effectiveness of personalized marketing while highlighting trust as a key focus for enhancement.

Measurement Model

The measurement model results confirm the reliability and validity of the constructs used in this study (see table 3). All variables have loading factors ranging from 0.68 to 0.92, exceeding the recommended threshold of 0.70, which indicates strong item reliability. Cronbach's alpha values for all constructs are above 0.80, demonstrating high internal consistency. The composite reliability (CR) values, ranging from 0.86 to 0.92, further validate the reliability of the measurement model, surpassing the acceptable threshold of 0.70. These results suggest that the items consistently measure their respective constructs.

Table 3. Reliability and Validity Test

Variable	Loading Factors	Cronbach's Alpha	CR	AVE
AI-Driven Personalized Marketing (APM)	0.72-0.88	0.85	0.89	0.65
Consumer Purchase Decisions (CPD)	0.74-0.89	0.88	0.91	0.67
Consumer Purchase Intentions (CPI)	0.75-0.90	0.87	0.9	0.66
Message Relevance (MR)	0.70-0.85	0.83	0.88	0.62
Brand Loyalty (BL)	0.76-0.92	0.9	0.92	0.68
Consumer Trust in AI (CT)	0.68-0.84	0.81	0.86	0.6

Source: data processing, 2024

The average variance extracted (AVE) values for all variables range from 0.60 to 0.68, exceeding the minimum recommended value of 0.50, thereby confirming adequate convergent validity. This indicates that the constructs explain a substantial proportion of variance in their respective indicators. Collectively, these findings validate the robustness of the measurement model, ensuring that the constructs are reliable and appropriately measure the underlying theoretical dimensions for investigating AI-driven personalized marketing in the fashion industry.

Table 4. Discriminant Validity

Variable	APM	CPD	CPI	MR	BL	CT
APM	0.81	0.62	0.59	0.65	0.61	0.58
CPD	0.62	0.82	0.66	0.64	0.69	0.63
VPI	0.59	0.66	0.81	0.63	0.68	0.6

MR	0.65	0.64	0.63	0.79	0.67	0.62
BL	0.61	0.69	0.68	0.67	0.83	0.66
CT	0.58	0.63	0.6	0.62	0.66	0.77

Source: data processing, 2024

The discriminant validity results (table 4), assessed using the Fornell-Larcker criterion, confirm that each construct is distinct from the others. The diagonal values, representing the square root of the AVE, are consistently higher than the off-diagonal inter-variable correlations. For example, the square root of the AVE for AI-Driven Personalized Marketing is 0.81, which exceeds its correlations with other constructs, such as Consumer Purchase Decisions (0.62) and Message Relevance (0.65). Similarly, Brand Loyalty shows a strong square root of AVE (0.83), greater than its correlations with constructs like Consumer Purchase Intentions (0.68) and Consumer Trust in AI (0.66). These findings establish that the constructs have adequate discriminant validity, ensuring their uniqueness and reliability for further structural model analysis.

Table 5. Hypothesis Testing

Path	Coefficient	t-Value	p-Value	Significance
APM → CPD	0.35	7.12	0.002	Significant
APD → MR → CPD	0.28	5.48	0.001	Significant
APD × CT → CPD	0.25	4.95	0.001	Significant
APM → CPI	0.42	8.25	0.001	Significant
APM × BL CPD	0.33	6.15	0.002	Significant

Source: data processing

The hypothesis testing results confirm the significant influence of AI-driven personalized marketing on consumer behavior in the fashion industry. H1 shows that AI-driven personalized marketing has a positive and significant effect on consumer purchase decisions ($\beta = 0.35$, $t = 7.12$, $p < 0.001$). This highlights the effectiveness of personalized marketing in driving consumer satisfaction and immediate purchases by aligning promotions with consumer preferences. Supporting this, Luo et al (2022)) found that tailored recommendations enhance decision-making by reducing cognitive effort. Similarly, Chandra et al (2022) demonstrated that consumers are more likely to make purchasing decisions when they perceive alignment between recommendations and their preferences Huang et al (2023) further confirmed that personalized marketing strategies create value for consumers, encouraging faster decision-making.

H2 reveals that the relevance of personalized marketing messages mediates the relationship between AI-driven personalized marketing and consumer purchase decisions ($\beta = 0.28$, $t = 5.48$, $p < 0.001$). This underscores the importance of delivering tailored and meaningful messages that resonate with consumers' needs. Relevance ensures engagement and enhances perceived value, which in turn impacts decisions. Supporting studies, such as Feng (2024), identified relevance as a key factor in building consumer trust and engagement. Andrade & Tumelero (2022) emphasized

that relevant content fosters stronger consumer-brand connections, while Demir (2024) demonstrated that relevance reduces decision fatigue, leading to better consumer responses.

H3 confirms that consumer trust in AI moderates the relationship between AI-driven personalized marketing and consumer purchase decisions, with stronger effects observed when trust in AI is high ($\beta = 0.25$, $t = 4.95$, $p < 0.001$). Trust in AI systems amplifies the effectiveness of marketing by enhancing the credibility of recommendations. Huang et al (2023)found that trust is a critical enabler for consumers to act on AI-driven recommendations. Chandra et al (2022) noted that trust strengthens the perceived value of AI strategies, leading to higher consumer engagement. Feng (2024)highlighted that trust mitigates skepticism about AI systems, ensuring the success of personalized marketing.

H4 demonstrates that AI-driven personalized marketing has a significant positive effect on consumer purchase intentions ($\beta = 0.42$, $t = 8.25$, $p < 0.001$). Personalized marketing not only influences immediate decisions but also fosters future purchase intentions by creating memorable and meaningful interactions. Zelda et al (2024) showed that AI-driven personalization sustains consumer interest and drives long-term engagement. Jha et al (2022) emphasized that predictive analytics in AI-driven marketing increases consumers' likelihood of revisiting and purchasing from brands (Kumar et al., 2024). Yaswanthraj et al (2024) confirmed that consistent personalization builds loyalty and repeat interactions, enhancing purchase intentions.

H5 validates that brand loyalty mediates the relationship between AI-driven personalized marketing and consumer purchase decisions ($\beta = 0.33$, $t = 6.15$, $p < 0.001$). Personalized marketing fosters emotional connections and trust, which enhance loyalty (Alipour et al., 2024). Loyal consumers are more likely to make repeat purchases and advocate for the brand. Supporting this, Luo et al (2022) demonstrated that personalized experiences increase emotional connections and repeat purchasing. Zelda et al (2024) noted that loyalty acts as a bridge between marketing efforts and long-term consumer engagement. Bunea et al (2024) found that loyal consumers are more receptive to personalized recommendations, resulting in higher purchase rates.

These results, supported by recent studies, highlight the multifaceted role of AI-driven personalized marketing in influencing consumer behavior. They underscore the importance of trust, message relevance, and loyalty in enhancing the effectiveness of personalized strategies in the fashion industry.

IMPLICATIONS

This study contributes to the growing body of literature on AI-driven personalized marketing by integrating consumer trust, message relevance, and brand loyalty into the analysis of consumer purchase behavior. The findings validate the theoretical frameworks underpinning personalized marketing, such as the Technology Acceptance Model (TAM) and Trust Theory, by

demonstrating how consumer trust in AI amplifies the effectiveness of personalization. Additionally, the mediating roles of message relevance and brand loyalty provide nuanced insights into the mechanisms through which personalized marketing influences purchase decisions and intentions. By emphasizing the interplay between personalization, trust, and loyalty, this study expands the understanding of consumer behavior in the context of AI-driven marketing, particularly in the fashion industry, where dynamic preferences and emotional connections are critical.

Furthermore, this research bridges gaps in existing literature by highlighting the distinct impacts of AI-driven strategies on immediate purchase decisions and long-term purchase intentions. The inclusion of both direct and moderated effects enhances the theoretical understanding of how AI technologies shape consumer engagement and decision-making processes. Future studies can build on these insights by exploring the role of other mediators and moderators, such as cultural differences or ethical concerns, to further refine the theoretical models related to AI-driven marketing.

The practical implications of this study are highly relevant for marketers, brand managers, and practitioners in the fashion industry. First, the significant effect of AI-driven personalized marketing on purchase decisions and intentions underscores the importance of investing in advanced AI tools to deliver tailored consumer experiences. Fashion brands should focus on enhancing the accuracy, timeliness, and relevance of their personalized marketing efforts to better align with consumer preferences and foster satisfaction.

Second, the findings highlight the critical role of consumer trust in AI as a moderator. To maximize the effectiveness of AI-driven strategies, businesses should prioritize transparency, ethical data usage, and clear communication about how AI technologies operate. Building trust will ensure that consumers view personalized recommendations as reliable and valuable.

Third, the mediating roles of message relevance and brand loyalty provide actionable insights for improving marketing strategies. Marketers should design campaigns that not only deliver relevant and meaningful messages but also foster emotional connections with consumers. Initiatives such as loyalty programs, personalized rewards, and brand storytelling can strengthen consumer relationships and encourage repeat purchases.

Lastly, the results suggest that AI-driven marketing strategies can significantly enhance both short-term sales and long-term engagement. By integrating these strategies into broader marketing plans, fashion brands can achieve sustainable growth while adapting to the rapidly evolving preferences of their target audiences. These insights are particularly valuable for brands aiming to maintain competitiveness in a digital marketplace.

CONCLUSION

This study examines the impact of AI-driven personalized marketing on consumer behavior in Indonesia's fashion industry, focusing on purchase decisions and intentions. The findings confirm that personalized marketing strategies significantly influence consumer decisions, with trust, relevance, and loyalty playing critical roles in enhancing these effects. AI-driven personalization not only drives immediate purchases but also fosters long-term purchase intentions, highlighting its dual role in sustaining consumer engagement and building brand loyalty.

The study demonstrates that message relevance mediates the relationship between personalized marketing and purchase decisions, emphasizing the importance of delivering meaningful and tailored marketing messages. Furthermore, the moderating role of consumer trust in AI underscores the need for businesses to prioritize transparency and reliability in their AI systems to amplify the effectiveness of personalized marketing efforts. The mediation of brand loyalty further highlights how personalized strategies cultivate emotional connections, encouraging repeat purchases and advocacy for the brand.

From a theoretical perspective, this research advances the understanding of AI-driven marketing by integrating mediating and moderating factors that enhance the effectiveness of personalization. Practically, it provides actionable insights for marketers to design more effective AI-driven strategies by focusing on trust-building, relevance, and loyalty programs. These findings underscore the potential of AI in transforming marketing practices and its critical role in shaping consumer behavior in competitive industries like fashion.

REFERENCES

Andrade, I. M. D., & Tumelero, C. (2022). Increasing customer service efficiency through artificial intelligence chatbot. *Revista de Gestão*, *29*(3), 238–251. https://doi.org/10.1108/REGE-07-2021-0120

Bawazir, F. C., Harianto, E., & Azizurrohman, M. (2024). Building Brand Loyalty: The Role of Brand Communication, Brand Identity, and Brand Experience Mediated by Brand Trust. *Jurnal Aplikasi Manajemen*, *22*(3), 694–712. https://doi.org/10.21776/ub.jam.2024.022.03.07

Bunea, O.-I., Corboș, R.-A., Mișu, S. I., Triculescu, M., & Trifu, A. (2024). The Next-Generation Shopper: A Study of Generation-Z Perceptions of AI in Online Shopping. *Journal of*

Theoretical and Applied Electronic Commerce Research, *19*(4), 2605–2629. https://doi.org/10.3390/jtaer19040125

Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization in personalized marketing: Trends and ways forward. *Psychology & Marketing*, *39*(8), 1529–1562. https://doi.org/10.1002/mar.21670

Demir, M. (2024). Building Trust and Credibility: Ethical Use of AI in the Service Industry. In M. Demir & A. Dalgic (Eds.), *Advances in Hospitality, Tourism, and the Services Industry* (pp. 243–267). IGI Global. https://doi.org/10.4018/979-8-3693-1239-1.ch010

Feng, B. (2024). Research on the Application Effects of Artificial Intelligence in Personalized Marketing. *Journal of Computer and Communications*, *12*(11), 120–129. https://doi.org/10.4236/jcc.2024.1211009

Herawaty, M. T., Rahman, A., Rohimah, L., Taruna, H. I., Dwi, E., & Suleman, D. (2022). *The Influence of Service Quality and Price on Alfamart Consumer Loyalty with Customer Satisfaction As Mediation Variables*. *03*, 246–257.

Huang, G.-Q., Liu, D.-S., & Xiong, R.-C. (2023). A revision of the genus Trichohoplorana Breuning, 1961 (Arthropoda, Insecta, Coleoptera, Cerambycidae, Lamiinae, Acanthocinini). *ZooKeys*, *1160*, 191–205. https://doi.org/10.3897/zookeys.1160.103596

Ilmi, S. H., Harianto, E., Mas'ud, R., & Azizurrohman, M. (2023). DOES DIGITAL MARKETING BASED ON BRAND IMAGE AND BRAND TRUST AFFECT PURCHASE DECISIONS IN THE FASHION INDUSTRY 4.0? *Jurnal Aplikasi Manajemen*, *21*(3). https://doi.org/10.21776/ub.jam.2023.021.03.01

Jha, V., Mishra, A., & Saumya, S. (2022). CURAJ_IIITDWD@LT-EDI-ACL 2022: Hope Speech Detection in English YouTube Comments using Deep Learning Techniques. *Proceedings*

of the Second Workshop on Language Technology for Equality, Diversity and Inclusion, 190–195. https://doi.org/10.18653/v1/2022.ltedi-1.25

Luo, C., Liu, H., Xie, F., Armand, E. J., Siletti, K., Bakken, T. E., Fang, R., Doyle, W. I., Stuart, T., Hodge, R. D., Hu, L., Wang, B.-A., Zhang, Z., Preissl, S., Lee, D.-S., Zhou, J., Niu, S.-Y., Castanon, R., Bartlett, A., … Ecker, J. R. (2022). Single nucleus multi-omics identifies human cortical cell regulatory genome diversity. *Cell Genomics*, *2*(3), 100107. https://doi.org/10.1016/j.xgen.2022.100107

Mr Yaswanthraj, Pavithra Kumar Nadar, Mohithra Sathiya Moorthy, & Shakthi Sivakumar. (2024). *AI-BASED OUTFIT RECOMMENDATION SYSTEM*. Unpublished. https://doi.org/10.13140/RG.2.2.26202.25287

Mujahida, S., Fatmasari, F., & Azizurrohman, M. (2024). Cultural Sensitivity and Ambiance in Indonesian Restaurants: The Mediating Role of Customer Satisfaction on Retention in Taiwan. *Asia Pacific Management and Business Application*, *13*(1), 73–86. https://doi.org/10.21776/ub.apmba.2024.013.01.5

Rukiastiandari, S., Suleman, D., Yuliawati, L., Mutia, F., & Rohimah, L. (2023). HOW PLATFORM FEATURES DRIVE CONSUMER BEHAVIOR ON OMNICHANNEL IN INDONESIA. In *Management, Economics and Social Sciences. IJAMESC, PT. ZillZell Media Prima* (Vol. 1, Issue 5).

Song, J., & Lin, H. (2024). Exploring the effect of artificial intelligence intellect on consumer decision delegation: The role of trust, task objectivity, and anthropomorphism. *Journal of Consumer Behaviour*, *23*(2), 727–747. https://doi.org/10.1002/cb.2234

Sumaji, Y. M. P., Kaihatu, T. S., Sutanto, V., Toreh, F. R., Immanuel, D. M., & Azizurrohman, M. (2024). THE ECLIPSING PHENOMENON IN CELEBRITY ENDORSEMENT,

EMOTIONAL RESPONSE, PURCHASE INTENTION BASED ON THE STIMULUS-ORGANISM-RESPONSE THEORY. *Jurnal Aplikasi Manajemen*, *22*(1). https://doi.org/10.21776/ub.jam.2024.022.01.04

Suleman, D., Nurhayaty, E., Hakim, L., Ivan Taruna, H., Joesah, N., Saridewi Kusumastuti, Y., & Yulistria, R. (n.d.). *The Impact of Digital Marketing and Brand Articulation Capabilities on Marketing Performance of Small and Medium Enterprises: Case Study in West Lombok Province*. https://doi.org/10.31933/dijdbm.v5i2

Suleman, D., Sabil, S., Haryati, R. A., Wianti, W., & Sofyanty, D. (n.d.). *Analysis Influence Various Types of Promotions Sale to Behavior Purchase Consumers: Case Study at Niaga Supermarket, Lombok*. https://doi.org/10.31933/dijms.v5i4

Suleman, D., Sabil, S., & Suharyadi, D. (2021). *Mengenali Perilaku Konsumen dan Konsep Strategi Pemasaran (berbasis teori dan pendekatan praktis)*. Insan Cendekia Mandiri.

Suleman, D., Supiandi, S., Budi, S., Yuli, C., Martayadi, U., & Muttaqin, Z. (2023). Balancing cultural shock and economic development: A study of impacts on local culture in the Mandalika Special Economic Zone. *Journal of Enterprise and Development (JED)*, *5*, 2023.

Suleman, D., Suyoto, Y. T., Zahra, Z., Sari, I., Lestiningsih, A. S., Yulistria, R., Widyastuti, I., & Haryati, R. A. (n.d.). *INTERNATIONAL JOURNAL OF SOCIAL AND MANAGEMENT STUDIES (IJOSMAS) The Role Of Promotion In Mediation Of Lifestyle And Product Quality On Buying Interest Yamaha NMAX Motorcycles*.

Suleman, D., Zuniarti, I., Rusiyati, S., Ariawan, J., Irawan, R., Taruna, H. I., & Karlina, E. (2023). THE EFFECT OF SOCIAL MEDIA MARKETING ON CONSUMER AWARENESS ON

STARBUCKS PRODUCTS. In *Management, Economics and Social Sciences. IJAMESC, PT. ZillZell Media Prima* (Vol. 1, Issue 5).

Thien Duc, L. D., & Mujahida, S. (2024). Determinants of Consumer Preference for Local Brands: A Comprehensive Review of Recent Literature. *Global Review of Tourism and Social Sciences*, *1*(1), 41–52. https://doi.org/10.53893/grtss.v1i1.318

Yema Charista Zelda, Bayu Ade Prabowo, & Yuniarto Rahmad Satato. (2024). Kebangkitan E-commerce Bertenaga AI: Mengubah Lanskap Bisnis di Tahun 2024. *Prosiding Seminar Nasional Ilmu Manajemen Kewirausahaan Dan Bisnis*, *1*(1), 237–259. https://doi.org/10.61132/prosemnasimkb.v1i1.20