

Understanding Consumer Resistance to AI-Powered Marketing in Indonesia

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Abstract. As the largest digital economy in Southeast Asia, Indonesia has followed global digitalization trends, including digital marketing that is changing due to Artificial Intelligence (AI) to become more personalized, efficient, and competitive. Therefore, this article aims to explain a more localized understanding of technology adoption in marketing, by highlighting the unique challenges faced in emerging markets including Indonesia which faces its own challenges regarding AI acceptance. Through a qualitative approach with descriptive methods, the research findings show that AI-based marketing uses technologies such as machine learning, natural language processing (NLP), and predictive analytics to create highly personalized, automated, and data-driven strategies that improve consumer interactions, simplify operations, and help businesses grow in various fields. It can be concluded that the adoption of AI-based marketing in Indonesia is still low due to limited digital literacy, emotional and cultural resistance, lack of trust and transparency, inadequate infrastructure, and the absence of local communication strategies that align with consumer values and expectations. The impact of this research is expected to enriches the literature on AI adoption in marketing by providing a localized, Indonesian perspective so that companies can design AI-powered marketing campaigns that are not only technologically advanced but also culturally sensitive and aligned with Indonesian consumer values.

Keywords: Artificial intelligence, marketing, marketing trends, marketing innovation, marketing communication, consumer, Indonesia

1. Introduction

Artificial intelligence (AI) has come a long way in the last few years, and it has changed the way business is done all around the world. AI is no longer seen as a futuristic technology accessible only to large multinational corporations, but has become an integral part of the operational strategies of many businesses. AI-powered marketing solutions that were once limited to narrower applications. With predictive analytics playing a key role in forecasting customer behavior, marketers are now moving from reactive approaches toward more proactive strategy development (Haleem et al., 2022). Brands across the world are increasingly integrating AI technologies into their marketing strategies including businesses in Indonesia. Pavel Yurovitsky, the CEO of KIT Global, a digital marketing agency, said that Indonesian businesses are using AI more and more to change their digital marketing strategies

in a world where the economy is unstable and consumer behavior is changing. The state of the economy is forcing businesses to look for ways to save money. Furthermore, Yurovitsky stated that AI helps businesses get results without spending too much. His client used AI to target and optimize content, which cut its cost-revenue ratio by up to 30% (Yurovitsky in Wicaksono, 2024).

Previous research has indicated that AI playing a growing role in influencing consumer behavior and marketing strategies, and thereby also include data that is relevant to this research. Windarsari investigated the effect of AI on purchase loyalty toward Indonesian urban housewives and found that technological features, hedonic motivations, and anthropomorphism contribute to positive emotion or future interaction with systems based on AI (Windarsari & Rostina, 2025). Likewise, Laksmidewi et al. highlighted that consumer emotion is a key in influencing intention to use AI; youth express more enjoyment than anticipated by making an interface more human-like (Laksmidewi et al., 2024). At a more general level, Tadimarri et al. showed that AI adoption benefit to business provides a competitive advantage by gaining more knowledge of customer behavior and the expansion brand (Tadimarri et al., 2024). Masnita have reinforced this by demonstrating how AI-enabled devices provide instant data-driven examination of consumer trends, enabling us to progress from conventional segmentation to more accurate personalization (Masnita et al., 2023). Serving to enhance these findings, Pagala et al. contended that AI-powered personalized marketing, as well as predictive analytics of big data, have had an important effect on the consumer decision-making process and this highlights the disruptive nature of AI in today's business environment (Pagala et al., 2024). Collectively, these researches reveal the benefits and challenges in the implementation of AI in marketing, as well as offer a foundation in understanding cultural, emotional and contextual aspects underlying AI acceptance within Indonesia.

However, despite the global enthusiasm, AI-assisted marketing practices seem to be greeted with caution and resistance from the middle to the bottom layer of Indonesian consumers. Indonesia is the largest digital economy in Southeast Asia has followed worldwide trends in digitalization but faces its own challenges with AI acceptance. Yurovitsky said that AI adoption in Indonesia is still in the experimental stage. Even though Indonesian businesses are confident in AI's potential, they are still hesitant because of a number of problems. One big problem is that it's hard to choose the correct tools due to a lack of understanding about AI implementation. Many businesses don't want to use AI and automation solutions because they think it will be too expensive. Yurovitsky also remarked that businesses who are just starting to use AI should start with small projects and work their way up, focusing on metrics that show value rather than just utilizing AI just because it's new (Yurovitsky in Wicaksono, 2024). Initial insights indicate that accept AI-based features such as automated product recommendations, AI virtual hosts during live shopping or personalized chatbot engagement are reluctantly accepted by most Indonesian consumers. The reasons for the resistance could be many; it could be due to a lack of awareness towards AI, low digital trust, a mere preference for humans, or culture which is not okay with AI auto personalization. Recommendations from social media personalities, or influencers, tend to persuade Indonesian consumers to make a purchase.

A descriptive qualitative research design is applied in this research because the aim rather is not to quantify the extent of AI usage statistically, instead, it is to explore the how and why of consumer reactions to AI-powered marketing in Indonesia. Such arguments favor a descriptive qualitative as descriptive qualitative enable to unfold the detailed evidence about which cultural, psychological, and social factors impact and underlie resistance to AI that is not available from a structured-quotes perspective, captured through a scale-response based

survey. Utilizing descriptive way, this research can produce elaborate stories, outline perceptions and behavioral themes, as well as give contextualized understanding of the hurdles and landscape of AI adoption in Indonesia marketing practice. This methodology draws upon the full cultural knowledge and experience of both consumers and business which is essential to the co-creation and development of locally relevant, culturally sensitive communication strategies.

2. Literature Review

2.1 Marketing Trends and Evolution

In the world of marketing, trends and evolution are two key concepts that influence business strategies and practices. According to Kotler and Keller, marketing has evolved through four main stages: product-oriented marketing, sales-oriented marketing, customer-oriented marketing, and societal marketing. Each stage reflects changes in how businesses view the market and how they deliver value to consumers (Kotler & Keller, 2022). Modern marketing trends are heavily influenced by developments in digital technology and changes in consumer behavior. Recently, trends such as data-driven marketing, content personalization, and omnichannel customer experiences have become increasingly dominant. Chaffey and Ellis-Chadwick state that digital marketing has become the backbone of corporate marketing strategies, with the use of platforms such as social media, SEO, and digital advertising crucial for successfully reaching consumers who are increasingly connected online (Chaffey & Chadwick, 2019).

This is a big trend that marketing is becoming more personalized and relevant by mapping out the customer journey. This shows how important it is to connect all marketing channels so that customers have a consistent experience and also shows how marketing plans need to change all the time to keep up with changing consumer needs. The use of AI, machine learning, and predictive analytics shows how marketing has changed over time. With these technologies, companies can learn more about what their customers want, run campaigns automatically, and make their marketing more effective. Using AI in marketing has changed how companies run campaigns and see real-time results of those campaigns.

Additionally, social responsibility and sustainability are becoming more popular in marketing trends. Corporate ethical principles like social equality, environmental sustainability, and ethical business practices are now of greater importance to consumers. Sheth and Parvatiyar's research indicates that marketing is now about how companies can positively impact society and the environment in addition to selling products (Sheth & Parvatiyar, 2021). Businesses are no longer the primary source of credibility in this trend; instead, digital public figures are. Freberg asserts that social media influencers are essential in forming genuine customer trust and brand perceptions. Additionally, community-based marketing is expanding quickly. These days, brands are creating devoted client communities that engage in active communication via digital channels. This tactic promotes brand advocacy and increases brand engagement (Freberg et al., 2011).

The transition from a transactional to a relational approach is also reflected in the evolution of marketing. According to relationship marketing theory, establishing and preserving enduring relationships with clients is crucial. Building enduring client loyalty starts with commitment and trust. Globally speaking, marketing trends also adjust to variations in national cultures, technological advancements, and degrees of digitalization. A global marketing strategy—an approach that blends global strategies with local adaptations—is becoming increasingly important. Understanding local cultures is still essential for successful marketing, even though globalization makes products more homogenized. Practitioners must

be adaptable and capable of strategically incorporating new methods in order to keep up with the evolution and trends in marketing. As a result, marketing prioritizes generating long-term value for both society and consumers in addition to sales.

2.2 Artificial Intelligence in Marketing

Artificial intelligence (AI) is the next big revolution in digital marketing world. In the marketing arena, AI can harness big data to generate consumer messages on a vast scale (Kotler et al., 2021). This transforms AI from a technology-based to strategic marketing tool based on data. The most common AI application in marketing is when it comes to analyzing big data for consumer targeting and segmentation. By using machine learning and natural language processing, marketers are now able to segment consumers based on behaviors, preferences and digital measures of interactions (Davenport et al., 2020). By segmenting more specifically, companies are able to develop more relevant messages that they will send using marketing communications channels for higher reach and impact.

AI is transforming the customer experience, as well. For example, chatbots have been harnessed to provide on-the-fly responses to consumer questions without a human intermediary. This capability allows businesses to respond rapidly to thousands of questions while enhancing customer satisfaction and reducing operational costs. In the context of digital advertising, AI is used to automate ad buying (programmatic advertising), allowing advertisers to target specific audiences with tailored content in real time. This increases conversion rates because advertising messages become more contextual and relevant to user behavior. Furthermore, AI-based recommendation systems, such as those used by Amazon and Netflix, have demonstrated remarkable effectiveness in increasing sales through personalized product suggestions. AI not only strengthens B2C marketing but also has a significant impact on B2B marketing. In this sector, AI assists in prospecting, evaluating potential client value, and automating marketing content.

In Indonesia, the use of AI in marketing is still in its infancy. Several large e-commerce businesses, such as Tokopedia and Shopee, have begun implementing AI for content personalization, customer service, and product recommendations. However, broader adoption still requires improved digital infrastructure and technological literacy among small and medium-sized businesses (Setiawan & Kartajaya, 2022). AI is more than just technology; it has become an integral part of adaptive, data-driven, and customer-experience-oriented marketing strategies. To maximize AI's benefits, marketers must understand the characteristics of this technology, build consumer trust, and ensure its ethical use.

3. Method

This research employs a qualitative approach with a descriptive method. The descriptive method used to examine the status of a group of people, an object, a set of conditions, a system of thought, or a class of events at the present time. The aim of descriptive research is to create a systematic, factual, and accurate description, depiction, or portrayal of the facts, characteristics, and relationships among the phenomena being investigated (Kristiyanti, 2023).

In this research, the researcher endeavors to provide an in-depth description of Understanding Consumer Resistance to AI-Powered Marketing in Indonesia, supported by accurate facts and analyzes strategies to address it. Data collection was conducted through interviews and observations regarding AI-Powered Marketing. The qualitative descriptive approach emphasizes a deep understanding of phenomena using non-numeric data such as interviews or observations.

The data analysis technique is carried out through four stages: data collection, data reduction, data presentation, and the final step is drawing conclusions and verification. For research employing qualitative methods to be considered good, the collected data must be accurate and complete, consisting of both primary and secondary data (Sahir, 2021). The credibility of the data is examined at four levels; credibility test, transferability test, dependability test and confirmability test. All of these tests are devised with a view to verifying the accuracy, reliability and objectivity of the results obtained.

4. Results and Discussion

4.1 AI-powered Marketing

In today's digital era, companies are using digital marketing to reach out to customers. The world of digital marketing has transformed dramatically over the past decade with consumers having more accessibility and exposure to technology. Of these transformations, the impact of AI on how businesses engage with consumers has been unparalleled. It includes machine learning, natural language processing (NLP), predictive analytics, and others which makes marketers able to divert data-driven decisions and automate repetitive tasks (Kumar et al., 2024). Recent case studies have shown how powerful AI-driven marketing can be. Some businesses saw a shocking 547-fold boost in website traffic and a 50% rise in conversion rates. Another example is a big retail business in Indonesia that used AI to improve its advertising strategies, saving a lot of money without losing consumers (Wicaksono, 2024). Hendrayati, et al conducted quantitative research involved 100 businesses as the research sample selected through the stratified random sampling technique. 80 or 80% reported having integrated AI into their digital marketing practices. This research reveals a significant positive correlation between the integration of AI in digital marketing and improved marketing effectiveness. Businesses that proficient in leveraging AI technologies have seen a clear rise in consumer engagement metrics and significant improvements in conversion rates. Businesses that use AI are much better at adapting to the market's continuously changing conditions, which makes them more competitive. These important findings show how important it is to use AI's revolutionary powers in digital marketing tactics to stay ahead of the competition (Hendrayati et al., 2024).

Kumar et al. stated that AI technologies have given marketers powerful new tools and insights that have made campaigns more efficient, personalized, and strategic. AI is now used in different marketing roles and how it can change and affect marketing processes in the future. In a world that is changing quickly, businesses need to deal with complexity, come up with new ideas, and keep their competitive edge. AI as a good disruptive force, although it must be admitted that the use of AI also has limitations, the risks it poses to privacy and security, and the effects of biases, misuse, and spreading false information (Kumar et al., 2024).

Yurovitsky stressed the important of real-time personalization. AI can help with this by customizing marketing plans to fit each consumer's needs (Yurovitsky in Wicaksono, 2024). PT Indofood CBP Sukses Makmur Tbk through the Indomilk Steril brand presents the first AI technology in Indonesia that will allow anyone to receive a video call from their brand ambassador, Ariel, musician (vocalist) of Noah (a famous band in Indonesia). Through the support of this technology, in the video call, Ariel will mention the name of the person being contacted and give encouragement to them (Churi, 2024).

Consumers today are bombarded with thousands of adverts and communications every day, so mass marketing can easily become lost on them. Companies can personalize communication, content and products via personalization to ultimately improve their

customers' experiences. Hyper-personalization, powered by AI, takes this a step forward by using real-time data to predict consumer behavior to deliver highly targeted marketing strategies. Besides improving customer satisfaction, personalization also drives key business metrics, such as higher engagement rates, improved return on investment, and increased customer loyalty. This has increased the necessity for personalization in marketing. Today, customers want seamless, relevant experiences (Babatunde et al., 2024).

Just a few years ago, AI was about robots or futuristic movies, yet here we are, standing on the verge of this imminent reality. AI solutions are now dominant in many user-facing interactions. AI-powered chatbots influence the online shopping experience by personalizing the experience based on the customer's previous shopping data. Everyday uses of AI include automated customer support for customer queries and requests, travel assistance wherein chatbots provide users with travel recommendations, ticket booking, and landmarks recommendations. The growth of AI and its prospects for the marketing industry are immense (Kumar, 2021).

AI gained widespread recognition as a disruptive force that can revolutionize entire industries and bring about significant changes in business practices. Although according to Davenport et al. AI is propelling the productivity frontier for economies and businesses across various industries, marketing is undoubtedly one area with the most to gain from AI (Davenport et al., 2020). AI empowers marketers to customize their efforts to match consumers' requirements and preferences, thus promoting more meaningful and productive interactions.

A comprehensive global survey conducted by Salesforce Research revealed that the utilization of AI among marketing professionals has significantly increased compared to the previous year. The survey indicated that 87% of marketing professionals employed AI to bridge the gap between online and offline experiences, a notable increase from 71% in 2021. Additionally, 87% of marketing professionals utilized AI to effectively resolve customer identity, showcasing a rise from 82% in 2021. On the top, the survey indicated that 88% of marketers were using AI to automate processes such as reporting, jumping from 83% in 2021 (Salesforce Research, 2023).

Until the early 2000s, the notion of AI in marketing was still in its early stages when corporations began researching data mining techniques to better understand customer behavior and preferences (Aflalo, 2020). Customer segmentation, targeting, and positioning were the primary goals of early applications. Email marketing systems began to use AI to improve sending times and email content, leading to increased open rates and engagement. With the rise of search engines such as Google, the use of AI has become critical in building algorithms for search engine optimization (SEO) and pay-per-click (PPC) advertising (Main & Watts, 2022).

In the late 2000s, the growth of social media platforms such as Facebook and Twitter opened new avenues for AI. Marketers have slowly begun to use AI-powered tools for brand monitoring, sentiment analysis, and social media management and analytics (Kaput, 2024). In the 2010s, the introduction of chatbots and virtual assistants such as Siri and Alexa were a turning point in AI-driven marketing. AI-powered tools, made it possible for shoppers to receive immediate personalized interaction. The late 2010s brought big developments in machine learning and deep learning, allowing for more complex and independent AI marketing solutions. Content and visual recognition improvements through processing and analyzing unstructured data (text, photos, etc.). Over the course of the 2020s, AI has evolved in marketing from a technological support system to a core driver of forward-thinking strategies. Businesses are now adopting a wider application of AI-powered marketing applications, which were developed for more specific use cases. As predictive analytics is one of the technologies

that marketers heavily rely on to predict the behavior of customers, marketers tend to design strategies which differ from being reactive to proactive (Haleem et al., 2022).

AI has introduced several tools and technologies that are revolutionizing how marketers interact with consumers. Recommendation Engines is among the most widely used tools, particularly in e-commerce and content platforms. They scan through the history of user behavior and purchases in suggesting what products or services they could be interested in. Such businesses as Amazon and Netflix have successfully implemented recommendation engines in order to boost customer engagement and sales (Gao & Liu, 2023).

Another important technology is Predictive Analytics, which relies on the application of machine learning algorithms to predict future customer behavior through historical data. Marketers use predictive analytics for high-potential lead identification, campaign optimization, and consumer need forecasting. In terms of customer interaction and support, chatbots and virtual assistants powered by NLP offer real-time personalized communication. They can respond to queries, recommend products, and assist customers through the purchasing journey, increasing satisfaction and reducing response time (Gungunawat et al., 2024).

In fact, now AI technology has helped present the best perfume formulations. Oriflame utilizes AI Philyra technology in their two newest perfume collections to create scents that are precise, efficient, and environmentally friendly. The AI Philyra used by Oriflame is an AI technology that allows the creation of more precise scents by minimizing raw material waste. This technology helps perfume experts produce fragrance compositions that are more efficient and environmentally friendly, without reducing the quality of the perfume (Apriliani, 2025).

Several businesses in Indonesia have increasingly adopted AI to drive innovation and enhance their competitiveness across various sectors. These demonstrate how Indonesian businesses are proactively integrating AI into their core operations to innovate, enhance efficiency, and better serve their customers. As AI continues to evolve, its role in shaping the future of various industries in Indonesia is set to become even more significant. Enzim toothpaste becomes the first brand in Indonesia that uses an AI brand ambassador, named Alexa. The AI brand ambassador presented to deliver education about dental and oral health (Achyar, 2023).

In the financial technology sector, Bank Jago, one of the largest digital banks in Indonesia, represents how AI can change the future of financial services. Bank Jago uses AI across its entire spectrum of offerings to build a faster, safer and more efficient customer experience. In the e-commerce industry, Tokopedia, one of Indonesia's largest online marketplaces, uses AI in their e-commerce business to improve user satisfaction and increase operational efficiency. Another sector that also embraces AI is manufacturing, as happened with Astra International, one of the best manufacturing companies in Indonesia. Astra deploys AI to increase efficiency in production and reduce operational expenditure. This system scans the data related to machinery to predict maintenance and prevent equipment failure, thus avoiding unplanned downtime. For healthcare sector, Halodoc as one of the top telemedicine platform leverage AI to deliver better medical service to the public. Health chatbots powered by AI offer people preliminary consultations depending on symptoms, steering them in the correct direction towards receiving proper treatment.

4.2 Adoption of AI-powered Marketing by the Consumers in Indonesia

In Indonesia, the adoption of AI technology in marketing is still relatively low when compared to other countries. The main factor that is thought to cause this discrepancy is not just the availability of technology, but also the complexity of social, cultural and psychological factors from Indonesian consumers. This mainly happens because consumers and businesses do not understand what AI is, how it works, and what value it brings in marketing terms. And most

users have heard the term "AI" but may not realize how the technology can boost efficiency, personalization, and customer experience.

Technology resistance is a consumer behavior concept which is psychological and socio-political in nature, and where by consumer refuse/ post in organization to the advanced technology. Particularly, this resistance becomes a serious issue in Indonesia when the digital transformation is going so fast. The real reason technology is resisted is fear of the unknown and the complexity of new technologies. When consumers have already experienced some failure or challenge with technology, they form a negative bias against the new technology. Research by Nugroho, et al. indicated the adverse experiences on digital banking apps led to reluctant adoption of other online platforms which include AI-based marketing transactions (M. A. Nugroho et al., 2025).

The other key to understand Indonesian consumer resistance is trust. When Digital Consumer do not trust the security and privacy of Technology, they never want to be a part of such Digital Platforms. This study also received support for the findings from Alalwan on trust in preferably mobile commerce and it is happening in the Indonesian context where the country is no stranger to the various issues of misuse of personal data (Alalwan et al., 2017). Another way of understanding resistance is as an opposition to claiming that human values are being reduced through the dominance of technology. In this context, AI-based marketing technology such as Chatbots is viewed by some Indonesian consumers, for example, as a dehumanizing technology. In the Indonesian context, this resistance is compounded by cultural values that still prioritize direct contact management between individuals.

A study indicates that affective reactions like safety, trust and warmth are the most notable mediators of perceptions towards AI performance, where AI trust is the positive belief that AI can competently perform its intended functions, as well as believability and intimacy — which relates to the perceived form of humanity of the AI. Hedonic motivation and perceived anthropomorphism significantly influenced intention to use AI-based chatbots. If AI is perceived as “too cold” or unable to demonstrate human-like empathy, consumers are less likely to use it, even if the technology is efficient (Laksmidewi et al., 2024). Indonesian consumers are not accustomed to the extreme level of data-driven personalization so treat such use of data as an ethical violation. If the digital interaction flow is too aggressive, consumers might retreat from its Indonesian consumer technology resistance is a multidimensional construct with driving factors that span psychological, cultural, social, and demographic, as well as technology factors (Tjiptono, 2020). Although marketing technology may offer some advantages within a business, its adoption could be resisted and must be thoroughly understood before successful adaptive strategies are developed that incorporate local social and cultural knowledge into strategic development.

One major cultural barrier is consumer preference for a personal touch in sales interactions. In Indonesia's collectivist culture, warmth, direct social interaction, and a sense of emotional closeness are crucial elements in purchasing decisions. This is particularly evident in live selling practices, where consumers tend to feel more trusting and comfortable interacting with a live human salesperson rather than with a rigid and inauthentic AI system (Twilio, 2025). In Indonesia, the phenomenon of algorithm aversion—where consumers feel uncomfortable or even reject decisions made by machines even if they prove more accurate—remains very strong. In a collectivist cultural context like Indonesia, personal interaction, emotional closeness, and the human touch are considered essential elements in marketing communications. Consumers are more likely to trust humans because they are able to respond with empathy and social values that align with local norms. A Twilio survey showed that 87% of Indonesian consumers feel unheard in their interactions with AI, and 64% want

transparency regarding the use of this technology, including clear identification that they are interacting with AI, not humans (Twilio, 2025).

Technology adoption in Indonesia is also influenced by demographic factors, such as age and education. Older Indonesians exhibit higher resistance to the use of digital technology than younger generations. This factor indicates that digital literacy programs must be designed with diverse demographic characteristics in mind to effectively reduce resistance levels. According to McKinsey Technology Trends Outlook 2022, one of the key areas of debate surrounding applied AI is the concept of explainability. As AI models become increasingly complex and are applied to high-risk domains such as disease diagnosis, understanding how and why they produce certain outcomes is essential. In the same report, McKinsey & Company explains that closely related to explainability is the broader need for trustworthy and responsible AI. In addition to ethical concerns, businesses must also navigate other critical risks as they adopt AI technologies. Business owners must focus on the prioritization of AI applications. Because AI tools affect different stakeholders in different ways, businesses need to consider the broader impact of AI implementation—not just on their own operations but also on customers, partners, and society at large. This requires evaluating which applications offer the most significant benefits and aligning them with the business's ability to deploy, monitor, and scale AI responsibly. Strategic prioritization will help businesses maximize value while minimizing unintended consequences and ensuring long-term success in their AI initiatives (Chui et al., 2022).

Use resistance among Indonesians with fear of the technology is high. Reducing this resistance is possible via education and digital literacy. Conversely, technology acceptance is also shaped by national culture. Indonesian people will wait for the signal from the environment on whether to adopt new technology or not, indicating the influence of social pressure and group norms on the resistant of attitude (Aziz, 2025). The lack of public education about AI also worsens the problem. Many Indonesian consumers still view AI as a technology that belongs to the future or merely a cosmetic addition to digital systems. According to a Clueview Market Research report, only 19% of consumer respondents fully understand that AI is being used in features such as product recommendations, customer service chatbots, or personalized advertising in e-commerce. The rest are not even aware that they have interacted with AI-based systems. This situation is exacerbated by minimal outreach by brands or governments regarding how AI works and its implications for privacy, trust, and the shopping experience (Clueview, 2024).

The perception of AI as cold, inauthentic, and overly futuristic also plays a major role in decreasing adoption interest when interacting with chatbots or AI systems. They complain that interactions feel stiff and impersonal and fail to understand their specific needs. Many Indonesian users argue that AI in marketing is still more of a gimmick than a tool that truly adds value. Indonesian consumers, in many cases, perceive AI-generated decisions as insensitive to local contexts or cultural values. Such perception has a significant impact on the user experience, especially in sectors that rely heavily on human interaction, such as banking, customer service, and digital marketing. Research by Prabhakaran highlights the cultural incongruence in global AI systems that rely on universal data and ignore local cultural contexts, ultimately creating an emotional distance between the technology and users. In other words, the presence of "culture-neutral" AI actually becomes an obstacle when faced with consumers in high-context cultures like Indonesia (Prabhakaran et al., 2022).

Meanwhile, countries like the United States, the United Kingdom, China, and Singapore have been more successful in integrating AI into their marketing strategies because consumers there have high digital literacy, are more open to new technologies, and trust transparent systems. AI-based marketing in these countries is implemented with strategies

that incorporate transparency, user control, and a combination of human-machine interaction, or the human-in-the-loop concept. This attitude contrasts with the approach in Indonesia, where AI adoption is still viewed as a mere technological innovation without a communication strategy that prioritizes education and trust (Nagy & Hajdu, 2021).

The perception of AI as inauthentic and too futuristic contributes to low adoption. Indonesian communication culture places a strong emphasis on warmth, personal engagement, and interpersonal trust built through gestures, body language, and respect. AI, in the form of chatbots or voice assistants, is considered incapable of replacing these aspects. Consumers feel that AI can only carry out data-driven instructions but cannot capture the emotional nuances or social context typical of Indonesian communication. Businesses are incorporating human-in-the-loop as a crucial part of AI operations, so consumers feel in control of their digital interactions. Furthermore, people in developed countries are more accustomed to exploring new technologies and tend to adopt them more quickly. In contrast, Indonesia is a place where the majority of consumers tend to wait and see and require social validation before trying new technologies (Hendrayati et al., 2024). According to Ipsos Mori, people in English-speaking countries tend to be more skeptical of AI in terms of security but remain more open to its use for convenience. Brands in developed markets are more proactive in informing consumers when and how AI is being used and offer users the option to choose human interaction if desired. In direct contrast to the Indonesian approach of merely adopting AI technologies and not creating a communication strategy with a focus on education and trust (Mori, 2025).

Moreover, consumers are still not aware of how AI recommends products or how promotional campaigns developed through AI function which makes the consumers lose trust in the AI results. The problem arises because users are skeptical of machine-generated decisions, particularly when the AI system is closed (black box), and the user is not involved or has no control (Dietvorst et al., 2015). In addition, the shopping habits of Indonesian consumers is also another factor that contributes to the resistance against AI marketing. In this regard, AI that lacks a "face" or social identity is clearly considered less credible (Tech Collective, 2025). The Retail Asia (2025) report indicates that elements such as halal certification, local user testimonials, and emotional communication are more influential than algorithmic speed or efficiency (The Retail Asia, 2025).

It's also important to understand that the adoption of technologies like AI in Indonesia is heavily influenced by economic and educational structures. Indonesian marketers face several challenges in AI adoption, including a lack of technical skills, inadequate infrastructure, limited access to advanced AI tools, and resistance to change. Many marketers are still in the early stages of understanding AI, and the necessary technological backbone is often lacking, particularly in remote regions. MSMEs struggle with the high costs of AI solutions, creating a competitive imbalance (Clueview, 2024). Access to AI-enabled digital devices, such as sophisticated smartphones and stable internet connections, is uneven. Data from Indonesia Businesses shows that 84% of businesses in Indonesia acknowledge that infrastructure is the most significant obstacle to AI implementation, followed by limited digital talent and a lack of government incentives. Even among MSMEs, understanding of AI remains very limited, with many viewing it as expensive and complicated (Louis, 2025).

4.3 Strategy to Increase AI-powered Marketing in Indonesia

Ninety-two percent of businesses plan to spend more on AI during the next three years. But even while almost all businesses are putting money into AI, just 1% of CEOs say their business are "mature" on the deployment spectrum (Mayer et al., 2025). Digital transformation is not only a trend; it is a strategic need for all Indonesian businesses. Addressing difficulties like

resistance to change and the requirement for worker skill augmentation requires suitable management techniques (Jaswita & Dewintasari, 2025).

What could be a better strategy to get people to accept AI? Acar et al. stated that the key is to stress the human input that goes into making AI. Businesses should focus on showing the human skills that went into making AI products in order to get more people to embrace and trust them. Instead of giving AI a label, a human-like image, or focusing on its technological sophistication, it's better to talk about how real people were involved in making these systems. This approach was tested in a series of five empirical studies where participants were exposed to identical AI-generated feedback but with varying descriptions of the AI's development. People who were told that the AI was made by human experts thought the feedback was more useful and were more likely to use the technology. More research showed that when human involvement was highlighted, people felt they understood how the AI operated better, which made them more likely to like and embrace the technology. Making it obvious that AI systems were built and improved by professionals in their fields, such as teachers, doctors, or financial analysts, can greatly increase user trust in areas like education, healthcare, and finance. This communication strategy has benefits that go beyond only getting people to buy things. It changes the story from "AI versus humans" to "AI by and for humans," which can make people feel less scared about losing their jobs to AI and get employees more involved. Thus, to implement this approach effectively, businesses should first assess whether their current AI messaging overlooks the human element. This must be done in a real way to prevent making customers doubt or get angry. This story is not only true, but also powerful, because all AI systems are based on human choices, from data curation to model fine-tuning. Focusing on the real people behind AI is a better and longer-lasting strategy to develop trust, inspire confidence, and get people to use it (Acar et al., 2025).

Making AI products resemble human or taking away their humanity are not good strategies to convince people to utilize them. Instead, show them how much work and skill goes into making and designing them. The way to go is to show the people in AI instead of making AI more human. Anthropomorphizing tactics distort reality by depicting AI as human. Highlighting this straightforward fact—the crucial role of people in AI tools—can enhance perceptions of AI's use and diminish resistance to its adoption. Research findings demonstrate that the success of AI-based marketing depends not only on the availability of technology but also on psychosocial factors, communication culture, and consumer education strategies. To increase AI adoption in Indonesia, a multi-layered strategy is needed. First, massive and contextual public education must be carried out so that consumers understand that AI is not just a trend but a tool that can provide real benefits. Second, every interaction with AI needs transparency and accountability to enhance the trust of the public. Third, Infuse the human element in all AI interactions as a compliment, not a replacement. Finally, strengthening government policies and cross-sector collaboration is necessary to develop an AI ecosystem that is inclusive, affordable, and able to meet the unique needs of Indonesian consumers.

In Indonesia, several parties involved also educate users about the benefits of using AI. For instance, in digital marketing, many businesses themselves have been conducting education or socialization activities. For instance, GoPay has a blog on its website that talks about the benefits of AI, how AI has become a useful tool for small business to deal with problems in the market. The Indonesian government urges people to invest in AI in their country. Indonesia is on course to become one of the most important actors in digital transformation in Southeast Asia as more businesses start to include AI in their plans. The government is also pushing for the use of modern technologies like AI to make national businesses more competitive through programs like "Making Indonesia 4.0." But for AI to be successful, it's not enough for the technology to be good; the business also needs to be ready

to transform its systems, processes, and culture. With the appropriate technique, AI can help Indonesia's economy flourish and come up with new ideas.

5. Conclusion

AI-powered marketing has transformed business practices by enabling personalization, automation, and data-driven decision-making across industries, yet its adoption in Indonesia remains limited not only due to technological readiness but also cultural, psychological, educational, and infrastructural barriers. While leading companies in Indonesia such as Indofood, Enzim, Bank Jago, Tokopedia, Astra International, and Halodoc showcase AI-driven innovation, broader implementation faces challenges including low digital literacy, skepticism, preferences for human interaction, lack of transparency, and uneven infrastructure access, particularly among MSMEs. Despite 92% of businesses in Indonesia planning AI investment, only 1% report full integration, reflecting a gap between ambition and maturity. To unlock AI's projected US\$366 billion economic potential by 2030, Indonesia must address structural obstacles and prioritize culturally adapted strategies that build trust, enhance consumer education, and integrate human-centered design.

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