How is Artificial Intelligence Changing Consumer Behaviour in Indonesia? Potential and Implications for Society

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Artificial Intelligence (AI) plays an increasingly important role in the marketing sector in Indonesia, in line with rapid technological developments and digitalization. The aim of this research is (1) to find out how Artificial Intelligence changes consumer behaviour (2) to find out its potential and implications for society. This research uses a qualitative approach with a focus on literature studies, this analysis is to find out how AI changes consumer behaviour and what its potential and implications are for Indonesian society. The research results show that AI creates a more personalized, efficient and safe shopping experience for Indonesian consumers. As for the potential and implications for society, namely: Overall, the potential for AI in Indonesia is very large, but it needs to be balanced with attention to the social, economic and ethical implications that may arise. A thoughtful and collaborative approach between government, industry and society will be key to maximizing the benefits of AI while minimizing its risks

INTRODUCTION
1.1 Background

Artificial Intelligence (AI) in Indonesia has experienced significant development in recent years. Governments and the private sector are increasingly realizing the potential of AI to increase efficiency and productivity in a variety of fields, including health, education, transportation, and agriculture. Several initiatives have been launched to encourage AI research and development, including collaborations between universities, research institutes and technology companies. Apart from that, there are also training and education programs to improve workforce skills in the AI field. However, challenges remain, such as a lack of adequate infrastructure, limitations in data access, and the need for clear regulations regarding the use of AI. Nonetheless, with the right support, AI has great potential to contribute to economic growth and improved quality of life in Indonesia.

Artificial Intelligence (AI) plays an increasingly important role in the marketing sector in Indonesia, in line with rapid technological developments and digitalization. Here are some aspects that explain the role of AI in marketing in Indonesia: 1) Personalization of Customer Experience: AI allows companies to analyse customer data in depth, so they can understand consumer preferences and behaviour. By using machine learning algorithms, companies can offer more relevant and personalized product recommendations, improving customer experience and driving loyalty. 2) Data Analysis and Trend Prediction: In the world of marketing, data is a very valuable asset. AI can help in collecting and analysing big data to identify market trends and consumer behaviour. With proper analysis, companies can make better and faster decisions in designing marketing strategies. 3) Marketing Automation: AI also plays a role in automating various marketing processes, such as sending emails, advertising campaign management, and social media management. With automation, companies can save time and resources, and increase operational efficiency. 4) Chatbots and Customer Service: The use of AI-based chatbots in customer service is increasingly common in Indonesia. 5) Better

Market Segmentation: AI allows companies to segment markets more accurately. By analysing demographic, behavioural and preference data, companies can group customers into more specific segments, so that marketing strategies can be tailored more precisely to each segment. 6) Advertising Optimization: In digital marketing, AI can be used to optimize advertising campaigns. By analysing ad performance in real-time, AI can help in determining the most effective channels, the right time to run ads, and the content that will most appeal to the target audience. 7) Augmented Reality (AR) and Virtual Reality (VR) Experiences: AI also contributes to creating more interactive marketing experiences through AR and VR technology. For example, companies can use this technology to provide consumers with a more immersive product experience, thereby increasing engagement and interest in the product. Overall, the role of AI in the marketing sector in Indonesia is very significant and continues to grow. By leveraging this technology, companies can increase efficiency, understand customers better, and create more effective marketing strategies. However, challenges such as the need for new skills and ethical concerns must also be addressed to maximize the potential of AI in marketing.1.2 Problem Statement

As the use of artificial intelligence technology in marketing and consumer interactions increases, there are challenges in understanding and managing the impact of AI on consumer behaviour. AI has the potential to personalize user experiences, predict preferences and influence purchasing decisions. However, these changes may also pose risks, such as consumer dissatisfaction, data privacy, and reliance on algorithms. Therefore, it is important to explore how AI can be used ethically and effectively to change consumer behaviour without compromising their trust and satisfaction.

1.3 Objectives and Scope

The scope of AI in this context includes various industries, such as e-commerce where understanding and influencing consumer behaviour is critical to business success. Likewise, it is limited to the potential and implications of AI in Indonesian society.

LITERATURE REVIEW

Technology often impacts and changes consumer behaviour. The emergence of Artificial Intelligence such as e-commerce and online shopping platforms has changed the way consumers buy products, compare prices, and check reviews, and access a wider choice around the world.

2.1 Related Work

Artificial intelligence (AI) has recently become an object that has received a lot of attention in marketing research as reflected in the many recent reviews and overviews related to a) general and strategic perspectives (Chintalapati and Pandey, 2022). The main problem from a consumer behaviour perspective according to (Kotler & Keller, 2016) is the extent to which the objects owned serve the function of defining and maintaining the consumer's self-concept or identity. It is also important for a marketer to understand that consumer behaviour varies, because each individual has different characteristics. Every consumer certainly has needs and desires to satisfy themselves. Consumer needs are a gap or conflict experienced between a reality and the impulses that exist within oneself (Mangkunegara, 2015). In fulfilling a need that is desired by every consumer, there is definitely a feeling of disappointment that arises within oneself if a need cannot be fulfilled. However, in contrast, if these needs can be fulfilled, happy behaviour and a sense of satisfaction will definitely emerge within oneself. In fulfilling needs, marketing management must determine the basic needs of consumers, while in fulfilling desires they must determine the basic wants of consumers.

Changes in Consumer Behaviour

Consumer behaviour includes the decision-making process and activities carried out by consumers physically in obtaining use or obtaining goods and services for consumption (Loudon and Bitta, 1993). Consumer behaviour is the actions, processes and social relationships carried out by individuals, groups and organizations in obtaining, using a product or other as a result of their experience with products, services and other sources (Zaltman and Wallendorf, 1979 in Mangkunegara , 2015). Including Consumers assess the credibility of the company based on various perspectives, including the quality of the network (Galib, M., *et al.* 2022)

Consumers often find ways to change their behaviour, and adapt and integrate technology into their brand consumer behaviour (Eastman et al., 2023; Kaur et al., 2023; Lim et al., 2023). Products with artificial intelligence (AI) functions perform thinking, decision-making, and social tasks, similar to human assistants. By exploiting these similarities to complement existing theories of technology acceptance, this research develops hypotheses about consumer preferences for purchasing or avoiding AI products and the variation in these preferences across consumers and types of AI products, which is new to the literature. (Bjorn ¨ Frank, 2024)

2.2 Research Gap

While there is a wealth of research showing that AI can influence purchasing decisions, there is little that explains in depth how these mechanisms work. Further research is needed to understand the psychological and social factors involved. Many studies focus on the short-term impact of AI interventions, such as product recommendations or personalized advertising. However, there is a need to explore the long-term impact of using AI on consumer behaviour and brand loyalty.

RESEARCH METHODS

In this research, the type of research carried out is a qualitative approach with an emphasis on literature study. The research method begins with identifying relevant literature sources that review changes in digital consumer behaviour in the context of e-commerce business. This initial stage involves searching for information sources such as scientific journals, books, research reports, and articles from trusted sources that discuss trends, patterns, and factors that influence consumer behaviour after the implementation of Artificial Intelligence. Next, after data collection is carried out, namely by collecting a selection of literature that best suits the research focus. The selected literature is then thoroughly analysed to identify key findings, relevant theories and consumer behaviour patterns.

FINDINGS

The results of research regarding the application of artificial intelligence (AI) to changes in consumer behaviour in Indonesia show several key findings. First, the use of AI in consumer data analysis allows companies to better understand consumer preferences and shopping habits. This leads to improved customer experience through more relevant product recommendations. Second, AI also contributes to increasing efficiency in customer service, such as through chatbots that can provide fast and accurate responses to consumer questions. This not only increases customer satisfaction but also influences their purchasing decisions. Third, research shows that consumers in Indonesia are increasingly open to new technology, including AI, which influences the way they interact with brands. Consumers tend to prefer brands that use advanced technology to provide better service. Overall, the application of AI in Indonesia has brought about significant changes in consumer behaviour, with a positive impact

on the shopping experience and brand loyalty. However, challenges such as data privacy and consumer trust in technology still need to be addressed.

The implications of artificial intelligence (AI) on consumer behaviour following aspects:

1. Personalize Customer Experience: AI allows companies to analyse consumer data in depth, so they can offer more personalized experiences. Product recommendations tailored to individual preferences can increase customer satisfaction and loyalty.
2. Increased Service Efficiency: With chatbots and virtual assistants, consumers can get information and help quickly and efficiently. This reduces wait times and improves user experience, which in turn can influence purchasing decisions.
3. Changes in the Decision-Making Process: AI can influence the way consumers search for information and make decisions. For example, intelligent search algorithms can help consumers find products that suit their needs more quickly, thereby speeding up the purchasing process.

AI has the potential to change consumer behaviour in positive ways, but companies must also consider emerging challenges, especially regarding privacy and ethical use of data.

CONCLUSION

Conclusions regarding artificial intelligence (AI) on changes in consumer behaviour show that AI has become a key factor in transforming the way consumers interact with brands and products. The application of AI enables personalization of customer experiences, increases service efficiency, and facilitates a more informed decision-making process. With the ability to analyse data in depth, AI helps companies understand consumer preferences and needs, which in turn increases customer satisfaction and loyalty. However, challenges related to data privacy and security remain important concerns that companies must overcome to build consumer trust. Overall, AI is not only changing consumer behaviour to be more adaptive and informed, but also creating new opportunities for companies to innovate and improve relationships with customers. Success in leveraging AI will depend largely on a company's ability to balance the benefits of the technology with ethical responsibilities and data protection.

RECOMMENDATION

For researchers interested in the use of Artificial Intelligence (AI) in changing consumer behaviour in Indonesia, here are several suggestions that can be considered in-depth analysis of existing consumer behaviour data. Use machine learning techniques to identify patterns and trends that can help understand Indonesian consumers' preferences and habits, and develop AI systems that can provide personalized product or service recommendations based on consumer behaviour data. This can increase consumer engagement and satisfaction.

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