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Article

The Effect Of Ai-Generated Personalized Content On Consumer Trust And Purchase Behavior: An Empirical Study

Article History:

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Keywords: Artificial Intelligence, Consumer experiences, Customer engagement, Strategic marketing, Technology

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INTRODUCTION

During recent years, artificial intelligence (AI) has become a powerful tool in customer service and strategic marketing, providing more personalised interactions, creative ways to resolve personalised issues, and flexible communication approaches. The growth of AI technologies has led to advanced tools such as real-time

chatbots, highly personalised recommendation systems, and virtual influencers in the last ten years. Integration of such innovations does more than just take over human tasks, as they reshape interactions by adding new emotional and intellectual layers that strongly impact how consumers make decisions. According to Bag et.al. (2022), Artificial Intelligence (AI) is gaining remarkable importance as the digital world continues to grow and change, pushing

companies to seek creative ways to boost customer engagement. Many businesses are now using AI-powered strategies to enhance their marketing performance in this rising competition. Data analytics and AI-driven tools help

personalise content, companies suggestions, interactions by examining user behaviour and individual experiences. The present study also indicates that the expansion of personalised experiences, enhancing customer engagement, plays a key role in strengthening long-term brand loyalty. AI usage helps create "personalised" customer experiences which boost engagement and, in turn, strengthen brand loyalty." Trust still remains a complex and multi-layered concept, which is essential for customers to feel comfortable while sharing their personal information and making purchases. Kovari. (2024) stated that in this recent scenario, as personalisation grows more advanced and independent, "trust increasingly depends on how users view transparency, responsible data handling, balance between automated systems and human supervision." Therefore, from product recommendations and flexible pricing to customer ads and chatbot support, companies use AI to increase customer interaction, boost sales, and strengthen long-term loyalty. Additionally, AI can directly influence brand loyalty by shaping how consumers see a brand and affecting their overall buying behaviour. Vashishth et.al. (2024) mentioned that, by forecasting future actions and providing customised content, artificial intelligence is reshaping personalised experiences by processing large amounts of user data in real-time to identify preferences of products and services across areas such as online shopping, healthcare and education. With personalised health advice in healthcare, and flexible learning tools in education, it provides smart recommendations, targeting marketing, and instant engagement, such as product suggestions in e-commerce. Features such as the Generative AI for creating new text, images, and other content, natural language processing for understanding and interpreting human language, and predictive analytics for forecasting trends combine to support and enhance personalised customer experiences. Natural Language Processing (NLP), text analysis, and sentiment analysis are some of the essential AI technologies that play a crucial role. Such tools not only automate tasks that otherwise require significant manual effort but also provide powerful insights through advanced data analysis. Mittal et al. (2024) asserted that through recent research, we will also discuss how artificial intelligence is quickly emerging as a key driver towards the enhancement of AI-driven personalised experiences. AI allows organisations to deliver highly tailored interactions by examining information such as a customer's buying patterns, interests and feedback, ranging from product suggestions to customer support engagements. Even though AI-personalisation itself is successful, gathering and analysing large volumes of customer data for personalisation can create serious privacy concerns. Businesses must maintain clear transparency in how their AI systems operate to gain consumers' trust, as they need to focus more on responsible data management, as well as give users more control over their personal information

LITERATURE REVIEW

According to Shah et.al. (2020), the use of Artificial Intelligence (AI) in digital marketing over the past few

decades has attracted considerable academic interest. The present literature increasingly reveals that AI-powered personalisation boosts customer engagement, but it also brings complex issues around trust, privacy, and openness. AI-generated personalised content specifically refers to such digital information, such as articles, images, or product suggestions, that is produced or customised by artificial intelligence to match each user's unique interests and actions. Instead of offering standard content, artificial intelligence delivers highly relevant and engaging experiences across websites, emails, and other platforms to increase user interaction and conversion rates. Vashishth et.al. (2024) mentioned that AI-driven personalisation remains essential in this digital world, as it helps to support real-time content adjustments, enhances marketing efficiency by delivering automated insights into customer preferences, thereby helping businesses meet the growing demand for personalised content from modern consumers in the market. Strengthens customer engagement and loyalty by offering relevant, customised experiences on a large scale, resulting towards higher conversion rates and increased revenue. Consumers are faced with a marketplace full of options, so such customised content on online platforms helps brands to stand out and create a deeper relationship with the customers. In today's scenario, consumers in the market are used to receiving personalised services and look for such brands that share content that connects directly to their needs rather than generic messages. Noranee & bin Othman. (2023) stated that artificial intelligence examines large volumes of datasets to help businesses identify trends in customer actions and preferences, by offering them practical insights that can improve and lead to refining their marketing strategies. By the creation of more engaging and rewarding experiences, consumers of the market are presented with suggestions, content, and ads that are tailored to their individual preferences and interests. Businesses are able to adjust their content dynamically by analysing user behaviour in real-time to make better-informed decisions. Tailored recommendations and real-time content adjustments are helping users to discover products and services in a more efficient manner. AI-driven personalised content is created by gathering and examining users' data to identify consumers' preferences and behaviour patterns. According to Hollebeek & Macky. (2019), customers of the market are provided with content and suggestions that match their unique preferences and needs, thereby making their interactions more engaging and enjoyable. After this, to create customised text, images or other materials, they employ machine learning, natural language processing (NLP) and generative AI tools. These data-focused strategies enable organisations to provide "tailored marketing messages, product suggestions, and digital experiences to each user, enhancing engagement and fostering brand loyalty." Online platforms like Amazon leverage Artificial Intelligence to deliver customised shopping experiences. Proposes products based on their users' behaviour and preferences, powered by machine

learning algorithms through their recommendation system, which greatly increases purchase rates. "Artificial Intelligence has increasingly become essential in today's fast-changing digital marketing environment." Businesses across multiple sectors are using AI to improve their marketing approaches amongst their consumers, by gaining a strategic advantage over competitors. For example, a country like India has a strong preference for video content, so Amazon India leverages "AI-generated personalised tools to create engaging product videos for their sellers." AI-generated personalised marketing strategies for voice search are becoming increasingly important with the rising popularity of voice-assisted devices such as Amazon Alexa and Google Assistant. Moreover, digital assistants streamline processes such as registration, product listing, and advertising, supporting entrepreneurs and promoting broader e-commerce participation. From both product search to final delivery of products, Amazon's logistics system incorporates Artificial Intelligence and machine learning throughout its operations. The logistics team leverages AI to speed up deliveries by verifying customer addresses, recommending corrections, and choosing the most efficient packaging for each order by reducing waste and lowering environmental impact. The machine learning methods also help to eliminate incorrect listings and ensure accurate product details, maintaining customer confidence. Google employs algorithms to examine user data and provide targeted ads by using AI for customised advertising. Therefore, AIpowered analytics enable brands to optimise campaigns for customers and increase engagement. Retailers such as Walmart and Target utilise AI-generated personalisation to streamline supply chains and enhance customer engagement. Sephora, one of the cosmetics retailers, "utilises AI for virtual product try-ons and customised recommendations." Chen et.al. (2021) mentioned that AIpowered chatbots help customers select suitable products, improving their overall shopping experience. From such websites, mobile applications, social media platforms, and through email communications, AI platforms gather large volumes of customer information. Therefore, this information encompasses the customer's previous buying behaviour, demographics and other interactions to create comprehensive user profiles. While categorising consumers into groups with shared traits, machine learning models process such information to detect patterns and forecast user preferences. Dwivedi & Mahanty. (2025), asserted online platforms like Netflix leverage AI to deliver customised content recommendations, enhancing viewer satisfaction and boosting retention. AI technology examines watching habits and preferences to suggest relevant shows and movies. Amazon has also introduced its shopping proficiency in many regional languages, starting with Hindi in 2018, which has now increased to eight Indian languages, enabling users to shop in the language they understand best. Thus, to create a rich and pleasant experience in every language, the aforesaid point discussed combines advanced machine-learning

technologies with expert linguistic support, "thereby allowing seamless expansion across different regions and making Amazon's online shopping more accessible and inclusive." AI improves the customer experience by providing them with tailored recommendations, predictive insights, and efficient inventory management. According to Hassan et.al. (2025), the present research indicates that companies that are applying AI-driven personalisation have frequently experienced notable growth in their sales and stronger customer loyalty. This may lead to higher sales conversion, stronger brand image, and improved customer loyalty. AI enables ongoing evaluation of customers' data, allowing organisations to adjust their marketing strategies instantly. Still, customers' trust towards such personalised content presents us with a complex picture. While many consumers of the market show confidence and willingness to accept AI-driven content, there are also widespread concerns about its risks and credibility. The study highlights strong adoption rates, but it also raises notable worries about AI's potential to mislead, enable scams, or spread false information. Some consumer also remain unconcerned, by knowing of potential threats like cyberattacks, deepfakes, and phishing, which can lower their confidence and increase caution. People's awareness of ethical issues, such as copyright violations or the spread of false information, can influence how much they trust AI. Many users, especially in rural and semi-urban areas, do not completely understand the possible dangers of generative AI or how it functions, which can slow down their purchasing behaviour and reduce confidence. Williamson & Prybutok. (2024) mentioned that the encounter of AI-created content, which is false or misleading, can further create widespread doubt about online information and AI technologies. Businesses must clearly communicate their use of AI and explain how AI-generated content is created. While putting strong safeguards and ethical policies in place to prevent misuse or false representation, they need to share transparent details about what AI can and cannot do. This complicated design of AI algorithms often makes it hard to understand how they reach decisions, resulting in limited transparency and leaving users with minimal control over their data or the personalised experiences created for them. Kukreja et.al. (2024) stated that to gain positive purchasing behaviour and consumer retention rates, businesses must robustly secure their security protocols and encryption methods to safeguard user information from unauthorised access and potential cyberattacks. Gather only the essential information needed towards effective personalisation, which considerably minimises privacy concerns. Online platforms must offer users simple choices to opt in or opt out of personalised services and data gathering. Potwora et.al. (2024) mentioned that artificial intelligence enables marketers to deliver customised content and suggestions by boosting customer interaction and satisfaction. AIdriven tools also support real-time engagement with consumers, "improving customer service strengthening brand loyalty." Ingriana & Rolando. (2025)

stated that AI-driven personalised content and its recommendations have revolutionised how consumers gather information, evaluate products, and make decisions in online shopping. This technology provides a distinctive and sophisticated experience, becoming a major factor that shapes consumers' purchasing behaviour and overall shopping experience. Furthermore, it will let us explain that people who understand how personalisation tools function are more likely to view them as reliable and trustworthy.

OBJECTIVE

To explore the factors that determine the effect of AIgenerated personalised content on consumer trust and purchase behaviour

To know the impact of AI-generated personalised content on consumer trust and purchase behaviour

METHODOLOGY

225 consumers were surveyed to explore the factors that determine the effect and impact of AI-generated personalised content on consumer trust and purchase behaviour. Data collection and analysis are done through "Convenient sampling method" and "Exploratory Factor Analysis", followed by "Multiple Regression Analysis".

FINDINGS

In the study survey, males are 54.7% and the remaining 45.3% are female. 35.1% are below 36 years of age, 37.3% are between 36 and 46 years, and the remaining 27.6% are above 46 years. 13.8% respondents are students, 20.9% homemakers, 17.8% are self-employed, 23.6% are in the service sector, 16.4% are in business, and the remaining 7.6% are in other occupational sectors.

"Table 1 General Details of Respondents"

"Variables"	"Respondents"	"Percentage"	
Gender			
Male	123	54.7	
Female	102	45.3	
Total	225	100	
Age			
Below 36	79	35.1	
36-46	84	37.3	
Above 46	62	27.6	
Total	225	100	
Occupation			
Students	31	13.8	

Homemaker	47	20.9	
Self employed	40	17.8	
Service	53	23.6	
Business	37	16.4	
Others	17	7.6	
Total	225	100	

"Exploratory Factor Analysis"

"Table 2 KMO and Bartlett's Test"

"Kaiser-Mey Adequacy"	.796		
		"Approx. Chi-Square"	3205.277
"Bartlett's Sphericity"	Test of	f "df"	120
		"Sig."	.000

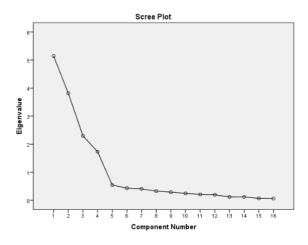
KMO value is 0.796, and the "Barlett's Test of Sphericity" is significant.

"Table 3 Total Variance Explained"

			i varianc	• 2p			
" C	l'Initial Higen values"			"Rotation Sums of Squared Loadings"			
"Compon ent"	"Tota 1"	"% of Varian ce"	"Cumulat ive %"	"Tota I"		"Cumulat ive %"	
1	5.144	32.150	32.150	3.596	22.478	22.478	
2	3.819	23.870	56.020	3.271	20.446	42.924	
3	2.296	14.349	70.369	3.063	19.143	62.067	
4	1.730	10.813	81.182	3.058	19.115	81.182	
5	.543	3.396	84.579				
6	.431	2.696	87.275				
7	.405	2.529	89.804				
8	.326	2.039	91.843				
9	.290	1.811	93.653				
10	.245	1.533	95.186				
11	.209	1.304	96.490				

12	.194	1.213	97.703		
13	.121	.753	98.456		
14	.119	.742	99.198		
15	.069	.429	99.627		
16	.060	.373	100.000		

In a "principal component analysis", 16 variables were grouped into 4 factors with 22.478%, 20.446%, 19.143% and 19.115% variance, respectively, and the total variance is 81.182%.



The graph above shows the Eigenvalues derived from the "Total Variance Explained" table, indicating an elbow point at 4 components.

"Table 4 Rotated Component Matrix"

"S. No."	"Statements"	"Factor Loading"	"Factor Reliability"
	Transparent use of AI		.962
	Businesses must clearly communicate their use of AI	.940	
	Explain how AI- generated content is created	.929	
	Gather only the essential information needed towards effective personalisation	.928	
	Businesses must maintain clear	.912	

transparency in how their AI systems operate to gain consumers' trust		
Relevant use of AI		.921
AI must deliver highly relevant and engaging experiences	.947	
Offer relevant, customised experiences on a large scale	.912	
AI technology examines watching habits and preferences to suggest relevant shows and movies	.837	
AI that updates personalisation to mitigate irrelevant suggestions	.827	
Data privacy and security		.893
Online platforms must offer clear and easy-to- understand privacy policies	.899	
Consider rules to minimise privacy concerns	.863	
Platforms must offer users simple choices to opt in or opt out of personalised services and data gathering	.854	
Allow users to manage their own data marketers	.808	
Ethical use of AI		.896

13	Companies must focus on ethical practices in their AI-based personalised approaches	.863	
14	Put strong safeguards and ethical policies in place to prevent misuse or false representation	.851	
15	Avoid bias while offering personalised suggestions	.845	
16	Avoid manipulated or misleading recommendations	.827	

Factor "Transparent use of AI" includes the variables like Businesses must clearly communicate their use of AI, explain how AI-generated content is created, gather only the essential information needed towards effective personalisation, and Businesses must maintain clear transparency in how their AI systems operate to gain consumers' trust. Factor "Relevant use of AI" consists of variables like AI must deliver highly relevant and engaging experiences, offer relevant, customised experiences on a large scale, AI technology examines watching habits, and preferences to suggest relevant shows and movies, and AI that updates personalisation to mitigate irrelevant suggestions. Factor "Data privacy and security" includes the variables like Online platforms must offer clear and easy-to-understand privacy policies, consider rules to minimise privacy concerns, Platforms must offer users simple choices to opt-in or opt-out of personalised services and data gathering, and allow users to manage their own data marketers. Factor "Ethical use of AI" includes the variables like Companies must focus on ethical practices in their AI-based personalised approaches, put strong safeguards and ethical policies to prevent misuse or false representation, avoid bias while offering personalised suggestions, and avoid manipulated or misleading recommendations.

"Table 5 Reliability Statistics"

"Cronbach's Alpha"	"N of Items"
.854	16

The overall reliability is 0.854 for the 4 constructs comprising sixteen items.

"Table 6 Model Summary"

"Model "	"R"	"R Square "	"Adjusted R Square"	"Std. Error of the Estimate"
1	.844	.713	.708	.38210

Predictors: (Constant), Transparent use of AI, Relevant use of AI, Data privacy and security, and Ethical use of AI

The adjusted R-squared value is 0.708 with approximately 71% of the variation.

"Table 7 ANOVA"

"N	IOGEI"	"Sum of Squares"	P*d+′′	"Mean Square"	"F"	"Sig."
	"Regressi on"	79.863	4	19.966	136.75 2	.000 ^b
1	Residual	32.120	220	.146		
	Total	111.982	224			

 Dependent Variable: Transparent use of AI, Relevant use of AI, Data privacy and security, and Ethical use of AI

 b. Predictors: (Constant), Overall impact of AIgenerated personalised content on consumer trust and purchase behaviour

Value under the significant column indicates a significant relationship between AI-generated personalised content (Transparent use of AI, Relevant use of AI, Data privacy and security, and Ethical use of AI) and customer trust and purchase behaviour.

Table 8 Coefficients"

Table 8 Coefficients						
"Model"	dard d	ize fici	"Stand ardise d Coeffi cients"	"'';"	"Sig."	
	"B"	"St d. Err or"	"Beta"			
(Constant)	4.23 1	.02 5		166 .10 1	.000	
Transparent use of AI	.064	.02 6	.090	2.4 90	.014	
Relevant use of AI	.126	.02 6	.178	4.9 28	.000	
Data privacy and security	.060	.02 6	.085	2.3 57	.019	
Ethical use of AI	.577	.02 6	.816	22. 605	.000	
i						

DV: Overall impact of AI-generated personalised content on consumer trust and purchase behaviour

The table shows that all the factors, transparent use of AI, relevant use of AI, data privacy and security, and ethical

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use of AI, have a significant impact on consumer trust and purchase behaviour. Highest impact is shown by Ethical use of AI with a beta value of .816, followed by Relevant use of AI (.178), Transparent use of AI (.090), and Data privacy and security with a beta value of .085.

CONCLUSION

As artificial intelligence continues to reshape e-commerce, maintaining customer confidence will become even more critical. Artificial intelligence, when applied responsibly and openly, can strengthen trust; however, if handled carelessly, it may weaken customers' confidence and trigger concerns or questions about privacy. Despite so many challenges related to trust issues, "AI is reshaping the industry by improving how marketers develop content and manage advertising, making it essential for businesses to utilise these tools to stay ahead of the competition." While allowing users to manage their own data, marketers of online businesses must offer clear and easy-tounderstand privacy policies. Being transparent is very crucial for earning consumer trust. With this growing use and constant advancement taking place in AI technology, the future of AI-generated personalised content is no longer just about staying current but driving innovation. The study shows that confidence in AI-driven personalisation is influenced by a mix of factors, including how relevant the content feels, how clearly data usage is explained, and the user's own concerns about privacy.

The study aims to explore the factors that determine the effect of AI-generated personalised content on consumer trust and purchase behaviour, and found that Transparent use of AI, Relevant use of AI, Data privacy and security, and Ethical use of AI are the factors that show the effect of AI-generated personalised content on consumer trust and purchase behaviour. The study concludes that AI-generated personalised content has a significant impact on consumer trust and purchase behaviour.

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